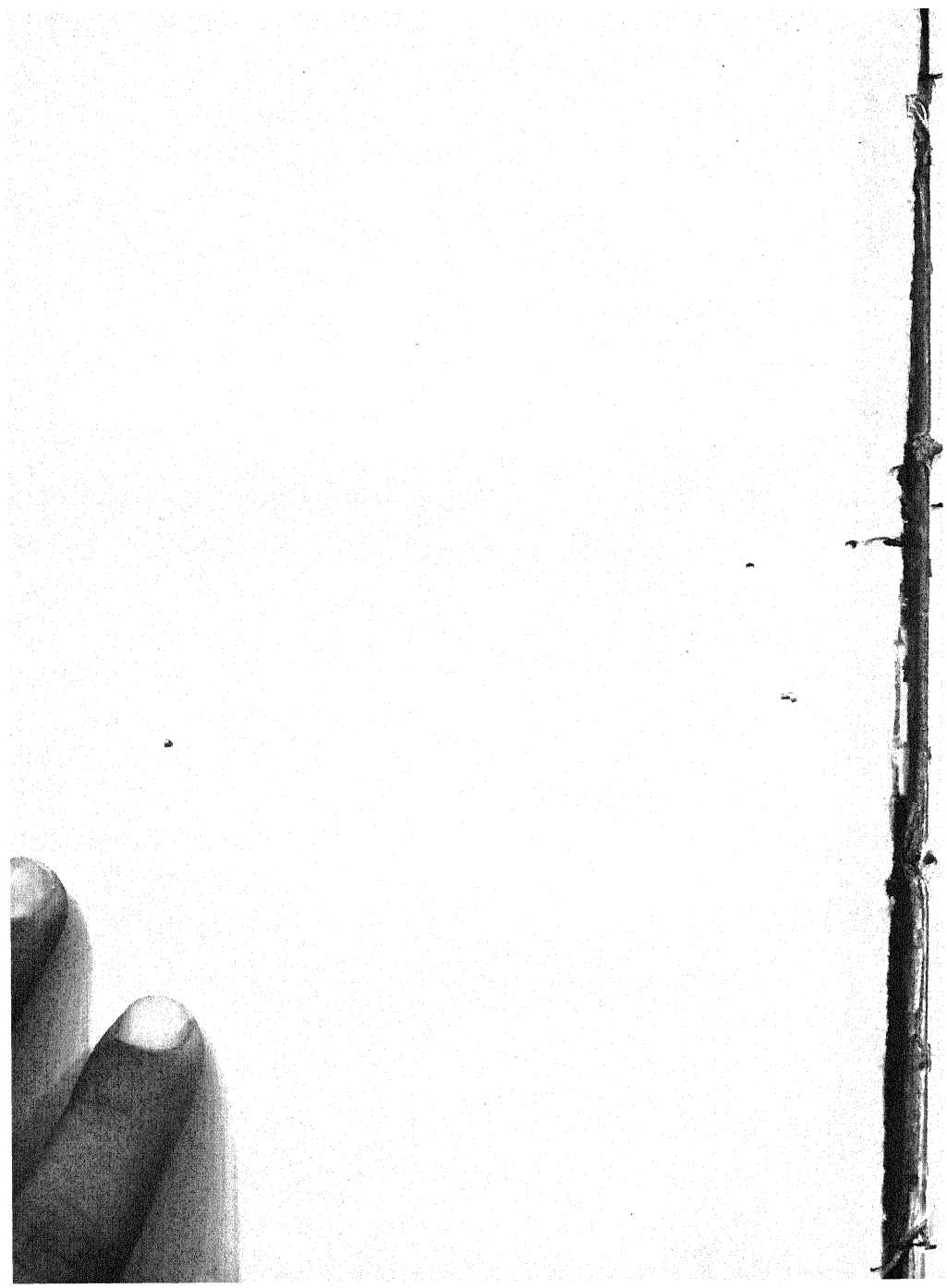


THE
NUMISMATIC CHRONICLE
AND
JOURNAL OF
THE ROYAL NUMISMATIC SOCIETY



THE
NUMISMATIC CHRONICLE
AND
JOURNAL
OF THE
ROYAL NUMISMATIC SOCIETY

EDITED BY

JOHN ALLAN, M.A., F.S.A.

KEEPER OF COINS, BRITISH MUSEUM

HAROLD MATTINGLY, M.A.

AND

E. S. G. ROBINSON, M.A., F.S.A.

DEPUTY KEEPER OF COINS, BRITISH MUSEUM

FIFTH SERIES—VOL. XIX



Factum abiit—monumenta manent.—Ov. Fast.

LONDON:

BERNARD QUARITCH, 11 GRAFTON ST., W. 1

PARIS:

MM. ROLLIN ET FEUARDENT, PLACE LOUVOIS, No. 4

1939

*Printed in Great Britain at the
UNIVERSITY PRESS, OXFORD
By John Johnson
Printer to the University*

**CENTRAL AGRICULTURAL
LIBRARY NEW DELHI**

Acc. 1247

Date. 15. 3. 54

Call No. 737.05 / ~~R.A.S.~~

N.C.

CONTENTS.

ANCIENT NUMISMATICS.

	PAGE
ALLEN, DEREK F.—The La Marquanderie Hoard of Armorican Coins	180
GOODACRE, HUGH.—Irene Dukaina	105
MATTINGLY, HAROLD.—The Great Dorchester Hoard of 1936	21
——— The Dewsbury Hoard, 1938	104
——— The Platana Hoard of Aspers of Trebizond	120
——— A Byzantine Hoard from Tel Atchana, North Syria	179
——— and PEARCE, J. W. E.—Barbarous overstrikes found in Fourth Century Hoards	266
——— and STEBBING, W. P. D.—Site-Finds from Rich- borough, including a scattered hoard of diademed "minimi"	112
MILNE, J. GRAFTON.—Notes on the Oxford Collection: (5) Lydia	185
PEARCE, J. W. E.—Shapwick III. A large Hoard of Valentinianian Aes.	128
——— The Gold Coinage of Theodosius I. Addendum	167
——— "Concordia" Solidi struck at Constantinople by Theodosius I	199
ROBERTSON, MISS ANNE S.—A Hoard of Denarii from Knapwell, Cambs.	175
——— A Roman Coin Hoard from Wimblington, Cambs.	177
SCHWABACHER, WILLY.—Contributions to Greek Numis- matics	1
——— A Find from the Piraeus	162
——— A Hoard of Drachms of Elis	239
SUTHERLAND, C. H. V.—A Berkshire Hoard of Roman Coins.	169

	PAGE
SUTHERLAND, C. H. V.—The Poughill (Devonshire)	
Hoard of Roman Coins	170
Roman Imperial Coins in the Oxford Collection (I)	216
The Coinage of Probus as a model for radiate imitations	228
Some British and Romano-British Coins	290
TOYNBEE, MISS J. M. C.—A new Gold Medallion of Constantius II	143
WADE, WILLIAM V.—A Hoard of Roman Coins from Chesterfield N. Derbyshire	284

MEDIEVAL NUMISMATICS.

ALLEN, DEREK F.—A Sterling of Sancho II of Portugal	182
OMAN, C. C.—Some Contemporary Imitations of Medieval Coin Motifs	323 222

ENGLISH NUMISMATICS.

ALLEN, DEREK F.—Some Civil War Hoards	183
---	-----

ORIENTAL NUMISMATICS.

ARKELL, A. J.—The Coinage of Ali Dinar, Sultan of Darfur, 1898-1916	149
GARDNER, G. B.—More Coins from the Johore River	98
MILES, GEORGE C.—The Ayyubid Dynasty of the Yaman and their Coinage	62
WALKER, JOHN.—Some New Coins from Kilwa	223

REVIEWS.

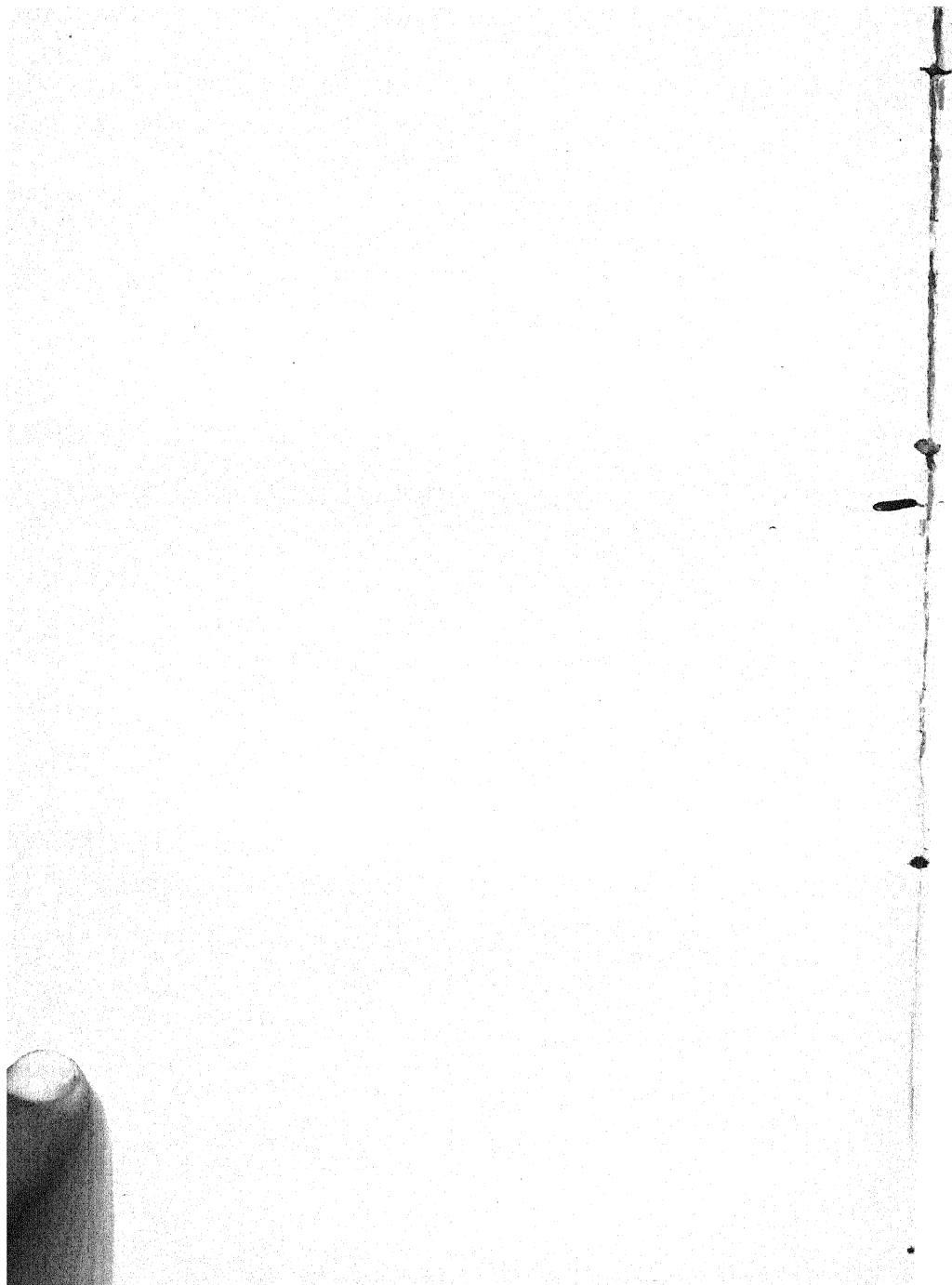
AHMAD, SHAMSUDDIN.—Supplement to Indian Museum Catalogue, Vols. II and III	294
VAN BERCHEN, DENIS.—Les distributions de blé et d'argent à la plebs romaine sous l'Empire	232
CALEY, E. R.—The Composition of Greek Bronze Coins	293
MILNE, J. G.—Greek and Roman Coins and the Study of History	294

LIST OF PLATES CONTAINED IN VOL. XIX.

- I. Contributions to Greek Numismatics.
 - II-IV. The Dorchester Hoard.
 - V. The Ayyubid Dynasty of the Yaman.
 - VI. Site-Finds from Richborough. Obverses.
 - VII. do. Reverses.
 - VIII-IX. Greek Coins in the Oxford Collection.
 - X-XII. "*Conob*" *Concordia* Issues of Theodosius I.
 - XIII. Roman Imperial Coins in the Oxford Collection (I).
 - XIV. A Hoard of Drachms of Elis.
 - XV. Barbarous Fourth Century Overstrikes.
-

PROCEEDINGS OF THE SOCIETY (separately paged).

LIST OF FELLOWS (separately paged).



I.

CONTRIBUTIONS TO GREEK NUMISMATICS.

[SEE PLATE I.]

THE publication of single unknown coins is in some respects alien to modern Greek numismatics, the aims of which to-day are rather the thorough examination of whole coinages, the establishment of die-sequences of Greek mints, and the intensive study of hoards. But essential though these methods are, the casual numismatic material which presents itself to one living in Greece must be treated in another way. Expeditions into the country reveal the existence of finds which are quickly dispersed; the Athenian market is of continual and changing interest; while Greek private collections contain important specimens or series which are little known in the rest of Europe. From among notes thus collected during the last few years, the present writer may perhaps be permitted to publish, in the manner of the older numismatists, the following selection of "unpublished coins", which, excluding unimportant variants, may lay claim to some general interest.¹

¹ I desire here to express my thanks to Mr. E. S. G. Robinson, to whom I am very much indebted for his care in reading the manuscript of this paper and discussing many questions arising from its contents.

MACEDON. UNDER THE ROMANS.

(158-150 B.C.)

1. *Obv.* Macedonian shield with thunderbolt in centre between MAKE - ΔΟΝΩΝ.

Rev. ΠΡΩΤΗΞ|ΜΕΡΙΔΟΞ Club in oak-wreath; beneath monogram ΝΕ; to l., star.

Æ 23 mm. 7.80 grm. (120.3 gr.) Didrachm.
Athens, Coll. Prof. N. Petsalis. [Pl. I. 1.]

It is owing to the kindness of its present owner that I have permission to publish this first didrachm of the well-known tetradrachm issue produced on so large a scale in Macedon under the Romans "between 158 and 150 B.C." Type and inscription exclude any doubt that this coin of Attic weight belongs to the series of those "häufigsten Münzen des Altertums"² which the first *μερίς* of the four new districts of the Roman dependency struck in vast masses at Amphipolis from the silver of the neighbouring Pangean mines. The appearance of this previously unknown denomination within such a large coinage is a strange phenomenon. It can hardly be explained otherwise than as an unsuccessful experiment immediately discontinued. The coin would consequently not be of great scientific importance were it not that the inscription, represented on all tetradrachms by the first two words only, is here given in full, divided between both sides of the coin; were it not, furthermore, for the monogram ΝΕ on the reverse, absent in this shape in H. Gaebler's list, *loc. cit.*, p. 57; and, finally, for the thunderbolt and star, which, though

² H. Gaebler, *Die antiken Münzen Nordgriechenlands* iii, 1, p. 3. *Zeit. f. Num.* xxiii (1902), p. 143. It seems to me at least a problem for further discussion whether this immense coinage could really have been produced during eight years only.

occurring separately as symbols, are never combined on any specimen of the hundreds of tetradrachms preserved to us. At all events this interesting piece must change the description of the Macedonian silver coinage under the Romans in the German Corpus from "Nur Tetradrachmen" into "Tetradrachmen und Didrachmen".

SCIONE.

(c. 480-450 B.C.)

2. *Obv.* Young male head r. with short hair (Protesilaos?) of late archaic style.

• *Rev.* $\Sigma K / I O N$ Dove standing r. on exergual line; in field above, two pellets; the whole in incuse square.

\mathcal{A} 13.5 mm. 2.1 grm. (32.4 gr.) Tetrobol.

Two specimens of the same dies seen in 1936 in Salonika. [Pl. I. 2-3.]

"The archaic coins of Scione are more numerous than has been hitherto suspected . . ." says B. V. Head in the *Historia Numorum*, without knowing their most important type: the famous Protesilaos stater which has since appeared in two specimens.³ The tetrobols described above, noted on a visit to Salonika in October 1936, form another addition to the older coinage of the Chalcidian town. The severe style of the youth's head on the obverse dates it before 450 B.C. This is the date which R. Jameson gives to the tetrobol in his collection which is stylistically very similar, but has a head to left and a helmet to left on the reverse.⁴ Still

³ *Brit. Mus. Quarterly*, i (1926), p. 24, no. 2; *Num. Chron.*, 1926, p. 120, no. 7; *Syll. Numm. Graec.*, vol. i, part I, Pl. V. 124 (=Cat. Naville XVI (1933), Pl. 33, no. 989). The name "Protesilaos" was first read by Sir George Hill.

⁴ *Coll. R. Jameson*, i, p. 215, no. 962 a, Pl. XCIV.

nearer is the British Museum piece (*B.M.C., Macedon*, p. 102. 1; *Traité*, ii, 4, Pl. CCCXVII, 14, and *Die ant. Münz. Nordgr.*, iii, 2, Pl. XXI, 12) with head to right like our pieces. As we now know that the helmeted head of the hero on the stater is that of Protesilaos the founder, it is possible that the youthful head on these and the new tetrobols also represents this mythical *οἰκιστής*.

The reverse of this coin recalls some later bronze pieces of the town, first published by Imhoof-Blumer, on which the same reverse type, a dove, is combined with a head of Aphrodite on the obverse.⁵ The same bird here, combined with the head of the youth (probably Protesilaos), seems obviously to be another allusion to the goddess of love, and we may see in both cases some reference to the story mentioned in two forms by Eustathios (*ad. Il.*, 2, 700, p. 235) which tells how Laodameia, Protesilaos' wife, incurred the wrath of Aphrodite by her enduring love for her dead husband.⁶

One of the staters mentioned above has in the field on the reverse a pellet like those above the dove on the reverse of our new tetrobols. What significance these pellets may have must remain unexplained.⁷ The existence of forgeries of the rare Protesilaos staters⁸ by no means justifies any doubt about the authenticity of the two specimens published by Sir George Hill and E. S. G. Robinson—a doubt obviously expressed by the

⁵ *Monn. Grecques*, p. 91, nos. 114–15; *Die ant. Münz. Nordgr.*, iii, 2, Pl. XXI, 16–17.

⁶ Cf. W. H. Roscher, *Lex. d. Gr. und Röm. Mythologie*, iii, 2, p. 3160.

⁷ Cf. Sir George Hill in *Num. Chron.*, 1926, p. 122.

⁸ *Revue num.*, 1933, Pl. III, 10–11; *Cat. Naville XIII* (1928), Pl. 14, no. 438; *Cat. L. Hamburger* 98 (1933), nos. 479–80.

surprising omission of this important Chalcidian type from *Die ant. Münz. Nordgr.*, iii, 2 (1935), p. 108, and Pl. XXI.⁹

UNCERTAIN MACEDONIAN COINAGES.

3. *Obv.* Dolphin to l. between two tunnies to r., the whole in a linear circle.

Rev. Irregular incuse square.

(a) Seen in 1936 in Salonika; now Athens, Coll. Prof. N. Petsalis. AR 3.49 grm. (53.9 gr.). [Pl. I. 5.]

(b) Berlin, AR 3.06 grm. (47.2 gr.). (The upper tunny off the flan.) [Pl. I. 4.]

* The Berlin specimen was first mentioned by Regling in *Zeit. f. Num.*, xxv (1906), p. 42, note 1, but has never been fully published.^{9a} He also combined it with the stater of the same type and fabric published by H. Dressel from the Sakha hoard,¹⁰ though without any attempt to localize the small group. H. Dressel, in publishing the stater, once suggested Posidium (Carpathos), but only to reject it. Among the "uncertain Macedonian" coinages recently collected by H. Gaebler¹¹ the type does not appear.

The new specimen of the quarter, however, seen in 1936 in Salonika, now makes a northern Greek origin

⁹ The unexplained pellet or pellets referred to above, which occur on both stater and tetrobol, provide another indication of the genuineness of the stater.

^{9a} Cf. E. Babelon, *Traité*, ii, 1, p. 1323, no. 1961 bis, under Thera; but cf. against this attribution K. Regling in *Zeit. f. Num.*, xxxvii (1927), p. 19, note 2. Thanks to the kindness of Prof. Liegle of the Berliner Münzkabinett, I am able to illustrate this specimen too.

¹⁰ *Zeit. f. Num.*, xxii (1900), p. 249, no. 64, Taf. viii, 18 (= *Traité*, ii, 1, p. 1323, no. 1961).

¹¹ *Die ant. Münz. Nordgr.*, iii, 2, p. 133 seq.

of the whole group very probable. This attribution might have been already conjectured from the presence of the stater in an Egyptian hoard where the preponderance of coins of the northern Greek districts is so characteristic.¹² In view of the fabric, the nature of the incuse, and the Macedonian provenance of the new specimen, Regling must be right in rejecting E. Babelon's attribution to Thera, and it may be suggested that this group is to be placed among the uncertain coinages of Macedonia.

4. *Obv.* Bee, seen in profile, crawling l.

Rev. Incuse square quartered.

3.48 grm. (52.7 gr.). Seen in 1936 in Salonika; now Athens, Coll. Prof. N. Petsalis. [Pl. I. 10.]

It is more difficult to find arguments for a similar attribution of the group to which no. 4 belongs. In 1936 this coin, together with no. 3 and no. 5, was in a dealer's stock in Salonika from whom it was purchased by Prof. Petsalis. The first specimen of this type, from the Myt Rahineh hoard, was published by Longpérier as a coin probably from the island of Ceos, because of the occurrence of the same insect on some later Cean types of Julis, Carthaea, and Coressia.¹³ Afterwards B. V. Head attributed coins of this type to Ephesus and placed them at the head of the series.¹⁴ And though Imhoof-Blumer ascribed them with some hesitation to the little island of Anaphe,¹⁵ their attri-

¹² See on this subject K. Regling in *Zeit. f. Num.*, xxxvii (1927), p. 27, and E. S. G. Robinson in *Num. Chron.*, 1930, p. 94.

¹³ *Rev. num.*, 1861, p. 420, Pl. VIII, 7.

¹⁴ *Num. Chron.*, 1880, p. 99, Pl. I, 1-2.

¹⁵ *Gr. Münzen* (1890), p. 543 (off-print p. 19).

bution to Ephesus has since held the field.¹⁶ Up till now only four specimens of this rare type have been published, two of unknown provenance (E. Babelon, *Traité*, ii, 1, nos. 435 a and 436), the other two from Egyptian hoards (*loc. cit.*, nos. 435 b and 436 bis). Our fifth specimen of this "quarter" with the bee in profile from Salonika is now, I think, sufficient to turn the scale in favour of an attribution to northern Greece. It is true that some of their incuses are related to certain of those with the bee seen from above, which must be definitely ascribed to Ephesus and are not found in Egypt or Macedonia. The weight standard, unfortunately, cannot help to decide the question, for the weights of the small fractions are too close together. We can only hope that future observations in Macedonia or the content of new Egyptian hoards may conclusively prove the attribution of the coins with the crawling bee-type to some northern Greek mint.

5. *Obv.* Head of a ram with big horn to r.

Rev. Incuse square.

Æ 4.09 grm. (63.1 gr.). Seen in 1936 in Salonika; now Athens, Coll. Prof. N. Petsalis. [Pl. I. 6.]

This third piece from the same small lot of anepigraphic coins from Salonika does not appear to have been described until now. Its style and fabric, however, together with reliable information that it was purchased in the surroundings of Salonika, seem to be evidence enough for its insertion in the series of uncertain coins from northern Greece. To say more

¹⁶ B. V. Head, *B.M.C. (Ionia)*, p. 48; *H.N.²*, p. 572; E. Babelon, *Traité*, ii, 1, p. 274, nos. 435-6 bis, Pl. XI, 13-14.

about this new type, which must date from the beginning of the fifth century B.C., is impossible without further and closer evidence of provenance.

6. *Obv.* Naked horseman brandishing spear¹⁷ in his raised r. hand, galloping to r. Indistinct letters beneath and before the horse.

Rev. Quadripartite incuse square.

Æ 2.75 grm. (42.4 gr.). Drachm. Athens, Coll.
Prof N. Petsalis. [Pl. I. 9.]

7. *Obv.* Same type (the spear also off the flan). Ground line.

Rev. Similar incuse square.

Æ 2.28 grm. (35.2 gr.). Drachm. Brit. Mus.
[Pl. I. 7.]

8. *Obv.* Same type.

Rev. Similar incuse square.

Æ 13.82 grm. (213.5 gr.). 1928 on the London
market. (Plaster cast in the Brit. Mus.)
[Pl. I. 8.]

Thanks to the kindness of Mr. E. S. G. Robinson, I am allowed to add to the drachm no. 6 from the Petsalis Collection at Athens an analogous piece without inscription, for many years in the possession of the British Museum¹⁸ and a very interesting stater, shown at the same Museum in 1928, the authenticity of which there seems no reason to doubt. These three coins finally prove the antiquity of an interesting group with barbarous horsemen, and other types recently discussed and condemned as forgeries.¹⁹ For there can

¹⁷ It is reasonable to assume the spear by comparison with the Weber drachm mentioned later and a tetradrachm in Mr. Newell's collection where the spear is quite clear.

¹⁸ Pl. I. 7. This coin, catalogued in *B.M.C., Macedonia*, p. 138, 14, was found at Salonika and procured for the Brit. Mus. by H. P. Borell.

¹⁹ *Die ant. Münz. Nordgr.*, iii, 2, p. 211, nos. 34-5. *Sitz. Ber. d.*

be no doubt that the Petsalis coin, kindly shown to me by its owner in 1938, is no less genuine than the two companion pieces, one in the British Museum from the Weber Collection²⁰ and the other in the Berlin Münzkabinett from the Löbbecke Collection, though the latter has recently been placed among the forgeries. A third closely related drachm of this kind was once in the Rhousopoulos Collection, and the author of that sale catalogue actually observed the letters beneath the horse (Hirsch, xiii (1905), Pl. XIV, no. 1004), which in fact are also to be seen on the Weber specimen, though they are not mentioned in the catalogue. These indistinct letters, it is true, are missing on the Löbbecke specimen, the British Museum drachm [Pl. I. 7], here illustrated for the first time, on the new tetradrachm [Pl. I. 8], and on an analogous tetradrachm with the rider to left in the former Coll. Prowe (Cat. Egger, xl, May 1912), Pl. X, 532. But the exact correspondence in style of these latter pieces and their relative weights show that all those types originate from one barbarous coinage.

On the other hand, the clearly legible letters ΙΦ appear on other horsemen staters of similar weight and fabric. They belong with all probability to the same series.²¹ The existence of individual forgeries of these coins can scarcely justify the condemnation of them all. Curiously enough they are closely linked to the

Preuss. Akad., 1935, p. 839, 4, Pl. I, 10. But cf. *Am. Journ. Arch.*, 1938, p. 73, n. 3.

²⁰ *Cat. of Coll. Weber*, vol. ii, no. 1895, Pl. 73. H. Gaebler, *op. cit.*, p. 211, no. 35, Pl. XXI, 6.

²¹ *Traité*, ii, 4 (1932), no. 1041, Pl. CCCXVIII. 9. *Sitz. Ber., &c.*, 1935, Pl. I, 10. *Kat. L. Hamburger*, 1933, Pl. XVII, 495. Another specimen in private possession in America (cast in the Brit. Mus.).

sphinx stater of the Benha el-Asl hoard²² by the use of the same reverse punch. This fact suggests a possible origin for all these coins in a barbarous northern Greek mint, where different Macedonian types were imitated.

For instance, another tetradrachm, apparently belonging to the same group, imitates a type of Sermylia, but with the omission of the dog under the horseman.²³ I have not seen the coin and so cannot say whether it is genuine or false, but the reverse-punch shared with the two coins mentioned above is not sufficient to condemn it. On account of their type all these horsemen coins have been attributed to Sermylia,²⁴ but without justification. Style, fabric, and the unexpected link with the sphinx tetradrachm from the Benha el-Asl hoard, combine to point away from an ordinary Greek mint to an unknown semi-barbarous mint working on the outskirts of northern Greece in the beginning of the fifth century B.C.

THESSALY. METHYLUM.

(c. 350 B.C. or later)

9. *Obv.* EYP Nike standing l., holds long fillet in both hands; her r. outstretched, her l. hanging at her side.

²² *Num. Chron.*, 1930, p. 104, 30, Pl. IX. 30 (= *Sitz. Ber.*, 1935, p. 4, no. 5, Pl. I, 9).

²³ *Sitz. Ber. d. Preuss. Akad.*, 1935, p. 839, 4, Pl. I, 11. Prof. H. Gaebler regards the presence of the dog under the armed warrior as proving the falseness of these Sermylvian coins; but cf. the description of a combat in Herodot. V, 1: 'ἀντικατιζομένων δὲ τῶν Περιθίων ἐν τῇ προαστείῳ, ἐνθαῦτα μονομαχίῃ τριφασίῃ ἐκ προκλήσιός σφι ἐγένετο. καὶ γὰρ ἄνδρα ἀνδρὶ καὶ ἵππον ἵππῳ συνέβαλον καὶ κύνα κυνί.' I owe this very important reference to Mr. E. S. G. Robinson.

²⁴ *Traité*, ii, 4, p. 646, no. 1041. *Die ant. Münz. Nordgr.*, iii, 2, p. 211, nos. 34-5. *Weber Coll.*, vol. ii, no. 1895.

Rev. ΜΕΘ-ΥΑ-ΙΕ-ΙΩΝ Naked warrior fighting to l., seen from behind, helmeted, with large shield in l., long lance in r. hand.

Æ 11 mm. 0.72 grm. (11.5 gr.). Aeginetic obol (worn). Athenian market 1937. [Pl. I. 11.]

10. *Obv.* Same type, but without letters; Nike holds wreath in her raised r. and fillet in her hanging l. hand.

Rev. ΜΕ-Θ-ΥΑΙ-ΕΙ-ΥΝ Same type.

Æ 0.76 grm. (11.8 gr.). Athens, Coll. Empedocles. [Pl. I. 13.]

The coins of this Thessalian town, the situation of which is still unknown, have been treated recently by E. Babelon in the *Traité*, ii, 4, p. 286. Of the fifth century B.C., only one drachm with the letters ΜΕ-ΘΥ seems to be known,²⁵ though several bronze coins and one silver obol of the fourth century B.C. establish the name of the town by their fuller inscriptions.²⁶ Nos. 9 and 10 provide a new type for the silver in addition to that of the obol illustrated by F. Herrmann and published by Sir George Hill.²⁷ It shows on the obverse a Nike like that of the reverse of two bronze types.²⁸ On no. 9, however, there is an incomplete inscription in the field to the left of the figure which may possibly represent the first letters of an epithet of Nike, or of the games where she is to crown the victor. The fillets which she carries on both variants recall that in the

²⁵ *Traité*, ii, 1, p. 1019. Head *H.N.*², p. 300.

²⁶ Cf. Imhoof-Blumer, *Zeit. f. Num.*, i, p. 93 seq. H. Dressel, *Zeit. f. Num.*, xxi, p. 212.

²⁷ *Zeit. f. Num.*, xxxiii, p. 38 note; Pl. I, 18. Description: *Traité*, ii, 4, p. 287, no. 506 a, but cf. *Num. Chron.*, 1927, p. 195, where Sir George Hill has corrected the inscription of this coin and published a bronze public measure inscribed with exactly the same form of the ethnic as on the silver obols.

²⁸ *Traité*, ii, 4, p. 286, no. 506. Also illustrated by E. Rogers, *The Copper Coinage of Thessaly* (1932), pp. 131-2.

hands of Nike on some Olympian staters, on tetradrachms of Catana, and on hemidrachms of Himera and other Sicilian towns, where sometimes she also carries a wreath as on our no. 10 and on the Methylum bronze types—perhaps to crown victors in local games.²⁹

The reverse has a new type, though well known from other mints. At first sight, this fighting hero recalls the coinage of Locri Opuntii. The only Locrian coins, however, on which the fighting Ajax, son of Oileus, is seen as here from the back, are the rare half-staters (*Traité*, ii, 3, p. 370, no. 432, Pl. CCVII, 6), with ΟΠΟΝΤΙΩΝ, and their successors after the battle of Chaeronea (338 B.C.) with ΛΟΚΡΩΝ (*ibid.*, p. 375, no. 441, Pl. CCVII, 14). The first of these types seems to have served as a model for our obols and for a third of Peirasia described below under no. 11. But any explanation of the types remains impossible so long as we lack all knowledge of the myths and history of this Thessalian town.

PEIRASIA, c. 400–344 B.C.

11. *Obv.* Youthful male head r. with short hair bound with taenia (Apollo Phylleios?).

Rev. ΝΟΞ|ΙΞ|ΑΡ|ΙΕΠ Naked bearded warrior, fighting to l. seen from behind, helmeted, with large shield in l. and long lance in r. hand.

Æ 0.785 grm. (12.1 gr.). Aeginetic obol. Athens, Coll. G. Empedocles. [Pl. I. 12.]

²⁹ *B.M.C. Sicily*, p. 41, nos. 1 seqq.; p. 80, nos. 37 seqq. Probably not in Himera, where the aplustre, on which the fillet is fixed, points perhaps to a naval victory; against this assumption, A. Holm, *Gesch. Siziliens*, iii, p. 597.

This small piece, which the owner has kindly allowed me to publish, seems to be only the second known coin of this little town in Thessaliotis, which was originally called Asterium.³⁰ The obverse shows a young male head recalling, among Thessalian silver types, the so-called head of Apollo or Ares (?) on the silver of Phalanna. In our case, however, it will be remembered that near Peirasia lay the site of Phyllos, where Apollo Phylleios was worshipped,³¹ and it seems not impossible to identify the head as of that deity.

The reverse is very similar to the new type of Methylum, described above, with the difference that the fighter here is bearded. We can only guess at its significance, for we know no more of the legends of this town than of Methylum.

PELOPONNESUS. ELIS-OLYMPIA.

(c. 460 B.C.)

12. *Obv.* FAAEION to l. and r. inwards. Eagle flying l. horizontally with outstretched wings, one shown above, the other beneath the body; three rows of symmetrical feathers.

Rev. A / 7 Nike wearing long chiton running r., l. leg advanced, wings and shoulders facing, rest in profile; l. arm raised, holding wreath, r. hand holding chiton backwards.

Æ 18 mm. 5.20 grm. (80.2 gr.). Drachm. Athens, Coll. Prof. N. Petsalis. [Pl. I. 15.]

³⁰ *H.N.*², p. 303. *Traité*, ii, 4, p. 294. For the history and geography of the town see now Friedr. Stählin in Pauly-Wissowa, *R.E.*, xxxvii (1937), pp. 102 seqq.

³¹ E. Babelon, *Traité*, ii, 4 (1932), p. 295.

(c. 460-450 B.C.)

13. *Obv.* Eagle flying r. horizontally, wings raised, the l. higher than the r. Claw holding breast of hare r. upside-down.

Rev. Thunderbolt between ∇ / A. All in incuse square.

Æ 17 mm. 5.35 grm. (82.5 gr.). Drachm.
Athens; Commerce. [Pl. I. 14.]

The Elis coins, nos. 12 and 13, are perhaps of some interest as supplements to C. T. Seltman's corpus. No. 12 [Pl. I. 15] seems to be the previously unknown drachm belonging to the British Museum hemidrachm of the same type, Seltman, Pl. VIII, 6 (p. 33). Though less well preserved than that piece, both obverse and reverse dies show that this whole type may be of an earlier date than that proposed by Seltman for the stater, the well-known piece with the "corrected Nike", i.e. about 452 B.C. at the beginning of his group C.³² The Victories of both examples at all events correspond stylistically in details more with Nike $\alpha\kappa$ of group B, series V (p. 14, nos. 38-39, Pl. II). The same may be said of the stater with the Nike $\beta\beta$ (Pl. III), a little more advanced, and perhaps "corrected" in the die to make it so. Our type, appearing now on stater, drachm, and hemidrachm, probably cut by one hand, may therefore be dated a full decade earlier, about 460 B.C., and incorporated in Seltman's group B.

The drachm no. 13 [Pl. I. 14] which appeared on the Athenian market in 1936, was struck with the same obverse die as Seltman, Pl. VIII, 4 (p. 20), of which I can give here, for comparison, a better illustration from another very fine specimen recently seen on the

³² *The Temple Coins of Olympia*, Cambridge 1921, pp. 21 and 33.

Athenian market [Pl. I. 16]. Instead of Nike we have on no. 13 the usual thunderbolt on the reverse. Whilst the eagle of the obverse die shows traces of long use, compared with its condition when combined with the Nike reverse as on the coin [Pl. I. 16], the reverse die with the thunderbolt seems to be still little used and is sharp in all its details. Therefore the sequence of these two reverse dies seems to be assured, and the coin may be associated with the stater Seltman, no. 67 (Pl. II, AN- $\alpha\omega$ in series VIII) as a new fraction and dated after the type with the Nike. It may have been struck some eight or ten years after the drachm published here under no. 12, c. 452 B.C., just at the end of Seltman's series VIII.

ARCADIA. TEGEA.

(c. 370 B.C. or later)

14. *Obv.* Head of Athena Alea r. in crested close-fitting Attic helmet with leather flap below and palmet-ornament.

Rev. Ξ T to r. inwards. Owl with closed wings standing r.

\mathcal{R} 24 mm. 11.40 grm. (176 gr.). Stater. Athens, Coll. Prof. N. Petsalis. [Pl. I. 17.]

This previously unknown stater formed part of a little hoard which I noticed on the Athenian market in June 1937, and have described in more detail below. Prof. Petsalis was lucky enough to acquire the unique coin, afterwards, from the owner of that hoard, who did not recognize its scientific interest because of a thick brownish oxide then covering the surface, but now carefully cleaned away.

With this stater Tegea joins the small number of those Arcadian towns striking large silver coins outside the Arcadian league, which had been renewed under the leadership of Epaminondas about 370 B.C. with the newly founded capital Megalopolis. The best known Arcadian staters of this time are of course those of Pheneus and Stymphalus.³³ C. T. Seltman has recently put their date back before the battle of Mantinea.³⁴ On the other hand, S. W. Grose dates the only known Tegean triobols of similar type to our stater "c. 370 B.C. or later" against Gardner, Head, and E. Babelon who had all put them in the period 420-370 B.C.³⁵ These triobols (or hemidrachms) with their somewhat careless treatment of the reverses and other peculiarities correspond very closely indeed with our stater. Together with them, I suppose, it might have been struck during those years of renewed rivalry between the Arcadian towns for the hegemony of the League, in opposition to the new foundation of Megalopolis. On this occasion a war almost broke out between Sparta, on the one hand, and Tegea and Mantinea, struggling against the new League, on the other.³⁶ Now, if the well-known silver and bronze coinages with the fighting hero Cepheus may be with some justification taken as "victory-coins of the federation party in Tegea"³⁷ after the successful intervention of

³³ *B.M.C. Peloponnesus*, Pl. XXXVI, 7 and XXXVII, 4. *Traité*, ii, 3, Pl. CCXXIV, 22 and Pl. CCXXV, 6-7, &c.

³⁴ *Greek Coins*, p. 165, note 3, where, it is true, no particular arguments for this very probable new date are given.

³⁵ *Cat. of McClean Coll.*, vol ii, p. 480 (where in the heading the numbers 6713-14 are to be changed to 7013-14!). Cf. *B.M.C. Sicily*, p. 200; *H.N.*², p. 454; and *Traité*, ii, 3, p. 658.

³⁶ *Xen. Hell.*, vi, 5-6 seq.

³⁷ E. Babelon in *Traité*, ii, 3, p. 662.

Epaminondas in this quarrel, the new stater could perhaps be conceived as a document of the activity of the autonomous (or separatist) party in the town. It would then prove that, at times, Tegea did not content herself with the coinage of small silver pieces, like the triobols mentioned above, but began to strike handsome staters with the magnificent head of the Tegean Athena Alea, claiming superiority over all Arcadians. With the staters of Pheneus and Styμφalus this didrachm thus seems to be evidence of these internal Arcadian disputes in the period between the battles of Leuctra and Mantinea. To give to the piece a more exact date within this space of time is not yet possible.³⁸

In artistic perfection this stater cannot compete with the types of Pheneus or Styμφalus. Nevertheless the youthful head of Athena still shows some characteristics of fifth-century art, a fact already remarked in other important coinages of the conservative highlands.³⁹ And it may be mentioned that the years in which the old temple of the goddess, after its burning in 395 B.C., is said to have been splendidly rebuilt with the collaboration of Scopas, correspond exactly with the date given above to the stater.⁴⁰

The owl on the reverse shows remarkable naturalistic features, for instance, in the design of the feathers and the eyes, &c., which distinguish it from its Athenian contemporaries.

³⁸ Cf. the history of the town during these years recently given by Hiller v. Gaertringen in Pauly-Wissowa's *R.E.*, ii, 1, p. 1127 seq., xxix, 1, p. 127 and ii, 9, pp. 113 seqq., where the older literature will be found.

³⁹ C. T. Seltman, *Greek Coins*, pp. 164-5.

⁴⁰ Cf. C. Weickert, *Das lesbische Kymation* (1913), p. 71: "ungefähr 365 B.C." *Le Sanctuaire d'Alea Athéna à Tégée* (1924), p. 128: "c. 360 B.C."

Both obverse and reverse types may have been imitated in Crete like other Peloponnesian types, such as those of Stymphalus at Chersonaes, of Argos at Cnossus and Tylisus. Some heads of Athena on certain staters and smaller coins from Itanus, for instance, are very similar to our Athena Alea, and the owls on copper coins of Cydonia may also be imitations of Tegean owls.⁴¹

By the courtesy of its first owner I was allowed to make brief notes on the hoard in which this stater appeared. Its composition, very characteristic of a Peloponnesian hoard of the middle of the fourth century, was as follows:

Aegina: 5 staters of the type, *Num. Notes and Mon.*, 24,⁴²
Pl. II, 12-15. (Period V, 404-375 B.C.).

Thebes: 1 stater, Head,⁴³ Pl. IX, 11 (446-426 B.C.) Worn.
2 staters, " Pl. X, 8 (426-395 B.C.)
1 stater, " Pl. XI, 1 seq. (379-338 B.C.)
HI-KE.
1 stater, Head, Pl. XI, 1 seq. (379-338 B.C.) A-A.

Macedon: 1 tetradrachm of Philip II. Müller 297;
H. Gaebler, *Die Ant. Münz. Nordgr.*, III, 2,
Pl. XXX, 37-40.

Arcadia: 1 stater of Tegea.

—
12 staters.

Trustworthy particulars about the site and the circumstances under which the hoard was found were,

⁴¹ J. N. Svoronos, *Numismatique de la Crète ancienne*, Pl. XIX, 15-16, and principally the rare stater Photiades sale (1890), Pl. VII, 1295 now in the British Museum, published *Journ. Intern. d'Arch. et Num.*, i (1898), p. 160, Fig. 4. Cydonia: Svoronos, *loc. cit.*, Pl. X, 89.

⁴² S. R. Milbank, *The Coinage of Aegina*.

⁴³ *The Coinage of Boeotia*, London, 1881.

as so often, not available—except the usual assertion “Peloponnesus”.

Remarkable is the number of $\chi\epsilon\lambda\omega\nu\alpha\iota$ in so small a hoard: five out of twelve pieces, all of the anepigraphic type. The lack of any piece with an inscription on the reverse (Milbank's Period VI, 375–350 B.C.!) is astonishing. However, this fact confirms E. T. Newell's analogous observations on some other Peloponnesian hoards.⁴⁴ It shows once more that the date of the first $\chi\epsilon\lambda\omega\nu\alpha\iota$ with inscriptions must be revised—a task not accomplished by Milbank in the monograph cited above, in spite of E. T. Newell's suggestion. But the most interesting contribution to Greek numismatics presented by this small hoard is its unique and previously unknown stater of the Arcadian town of Tegea.

CYCLADES. MELOS?

(About 600 B.C.)

15. *Obv.* Gorgoneion of early type.

Rev. Incuse square.

Æ 14.50 grm. (223.7 gr.). Athens, Coll. Prof.
N. Petsalis. [Pl. I. 18.]

At first sight, this early coin, acquired recently by Prof. Petsalis from a lady residing in the island of Melos, recalls the early billon series of Lesbos.⁴⁵ Both type and weight are similar, but a closer study shows many differences. The metal seems not to be billon as at Lesbos but pure silver; the incuse is quite different

⁴⁴ The Andritsaena hoard, *Num. Notes and Mon.*, 21, pp. 31–7; Alexander hoards IV (Olympia), *Num. Notes and Mon.*, 39, p. 17.

⁴⁵ *B.M.C.* (Troas), p. 151, nos. 6–8 (Pl. XXX, 4); *Traité*, ii, 1, p. 346, no. 551, Pl. XIV, 5.

from the small, neat incuses so characteristic of the Lesbos series; the style of the Gorgoneion with its big eyes, its pupils and the ornament between the eyebrows,⁴⁶ its mouth showing a whole row of teeth instead of only the big eye-teeth, seems to me very different from and perhaps earlier than that of the Lesbos coinages; and the fabric with the thick oval flan, recalling Aegina, can scarcely be compared with the flatter and rounder fabric of Lesbos. I therefore incline to ascribe this type to the island where it was found, especially as it seems not unrelated to the earliest known Melian type, published by C. T. Seltman.⁴⁷ The gorgoneion does occur as the reverse type among later Melian staters, but owing to the variety of reverse types in that period little stress can be laid on this point.

W. SCHWABACHER.

⁴⁶ This peculiarity, although not appearing on any coin type, is found on a Laconian vase in the Brit. Museum (B. 58), B.S.A. (1934), Pl. 44 (E. A. Lane), dated about the middle of the sixth century B.C. I owe this reference to the kindness of Mr. Martin Robertson of the Greek and Roman department of the Brit. Museum.

⁴⁷ *Num. Chron.*, 1926, p. 145, and *Greek Coins*, p. 40, Pl. III, 4.

II.

THE GREAT DORCHESTER HOARD OF 1936.

[SEE PLATES II-IV.]

ON May 11, 1936, there was discovered in Dorchester, Dorset, one of the largest and most important hoards of Roman coins ever found in our island. It was found at the back of 48 South Street, during rebuilding for Messrs. Marks & Spencer, in a pit in the garden of a large Roman building some 30 ft. to the west. The finder was a working man, Mr. A. E. McIntyre of 99 Damers Road, Dorchester. The coroner held his inquest at Dorchester on May 28, and the coins were adjudged to be treasure-trove and were forwarded in due course to the British Museum. The coins were contained in a one-handled bronze jug, a wide bronze basin, and in what had once been a wooden keg with bronze clasps: of the last only the slightest traces remained. The coins were covered with a thick green incrustation, uniform throughout—a fact that at once suggested, what was borne out by the subsequent classification of the coins, that the hoard, though spread over three separate containers, was essentially a single one. The coins were cleaned in the British Museum, a few in the Department of Coins, the great bulk in the laboratory. For a short note on the methods employed see *Museums Journal*, August, 1937.

More than 1,500 coins of common types were left in the original condition and returned to Dorchester Museum. There, in the original containers, which have

been presented by the kindness of Mrs. Downham, freeholder, and Messrs. Marks & Spencer, leaseholders, of the find-site, they preserve an impressive picture of the hoard as it was first uncovered to the light of day. Not far short of 3,000 coins were acquired by the British Museum, whilst small, representative sets were purchased for exhibition by Dorchester and Portland. The vast residue of the hoard has been finding a brisk market at Dorchester and has been doing its part to spread some slight knowledge of the third century of the Empire in Britain.

The distribution of the coins was as follows :¹

JULIA DOMNA	4
CARACALLA	22
MACRINUS	1
ELAGABALUS	120
JULIA MAESA	7
SEVERUS ALEXANDER	5 (all denarii)
JULIA MAMAEA	1 (denarius)
MAXIMIN I	6 (all denarii)
BALBINUS	29
PUPIENUS	39 (incl. one denarius)
GORDIAN III	8,890 (incl. two denarii)
SABINIA TRANQUILLINA	2
PHILIP I	4,939
OTACILIA SEVERA	1,001 (incl. one denarius)
PHILIP II	1,050
TRAJAN DECIUS	1,366
"DIVI"	85
HERENNIA ETRUSCILLA	518
HERENNIUS ETRUSCUS	270
HOSTILIAN	82
TREBONIANUS GALLUS	769
VOLUSIAN	632
AEMILIAN	50
CORNELIA SUPERA	2
VALERIAN I	346
MARINIANA, DIVA	20

¹ All coins are antoniniani, except when otherwise mentioned.

GALLIENUS	346
SALONINA	110
VALERIAN II	36
	<hr/>
	20,748 ²
	<hr/>

Details of the coins are as follows:³

JULIA DOMNA. 4. C. 211(4).

CARACALLA. 22. C. 277, 278 (Var. *rev.* Jupiter stands front, head r.), 278 (Var. *rev.* Jupiter stands front, head r., *obv.* radiate, cuirassed r.), 294, 295 (4-*obv.* radiate, cuirassed r., 1; *obv.* radiate, draped, cuirassed r., 3), 297, 297 (Var. *obv.* radiate, cuirassed r.), 338 (Var. *rev.* Jupiter stands front, head l.), 349 (Var. *obv.* radiate, draped, r., 4), 358, 358 (Var. *obv.* radiate, draped, cuirassed r.), 375, 390, 608, 612 (Var. *obv.* radiate, draped, cuirassed r.), 657 (Var. *obv.* radiate, draped r.).

MACRINUS. 1. C. 20.

ELAGABALUS. 120. C. 28, 28 (Var. *obv.* radiate, draped, r., 2), 31(4), 31 (Var. *obv.* radiate, draped, r., 7), 39(10), 39 (Var. *obv.* radiate, draped, r., 2), 66(2), 72(5), 72 (Var. *obv.* radiate, draped, r., 4), 111, 111 (Var. *obv.* radiate, draped, cuirassed, r.), 112(11), 113(10), 125(9), 126(3), 138(5), 139(2), 145, 146(2), 148, 148 (Var. *obv.* radiate, draped, r.), 243(4), 243 (Var. *obv.* radiate, draped r.), 254(7), 255(4), 259(5), 260(2), 280(3), 281(3), 291(5), 294(2).

JULIA MAESA. 7. C. 30(7).

SEVERUS ALEXANDER. 5 (all denarii). C. 27, 70, 161, 239, 325.

JULIA MAMAEA. 1 (denarius). C. 24.

² The total number received in the British Museum was 22,121: the difference is represented by coins only roughly identified and returned, uncleaned. It is certain that some hundreds of coins went astray before the hoard was taken into official custody, but it is very unlikely that the loss was more considerable or that it in any way seriously affects the general composition of the hoard.

³ All coins are of the mint of Rome, except as otherwise indicated. References are to H. Cohen, *Description historique des Monnaies frappées sous l'Empire romain* (2nd edition), vols. iv, v, 1884, 1885. The number of specimens of each coin, if more than one, is given in a bracket after the "Cohen" number.

MAXIMIN I. 6 (all denarii). C. 7, 31, 46 (*obv.* should read IMP MAXIMVS PIVS AVG), 64, 107(2).

BALBINUS. 29. C. 3(15), 6(9), 17(5).

PUPIENUS. 39 (incl. one denarius). C. 1(9), 2(5), 3(12), 19(4), 21(8), 26.

GORDIAN III. 8,890 (incl. 2 denarii). C. 17 (107-6, at least, Antioch, one forgery), 22(37), 25(140), 41(580), 48 (Antioch), 50(97), 52(2), 53(31), 58(2 Antioch), 62(139), 62 (Var. *obv.* IMP CAES GORDIANVS PIVS AVG), 67, 71(198), 72(41), 81(87), 86(131-1 Antioch, 1 base), 90 (5 Antioch), 92(21 Antioch), 92 (Var. *obv.* IMP CAES M ANT GORDIANVS AVG Antioch), 97(212), 98 (*rev.* nowheel, 163; *rev.* wheel, 138), 105(104), 109(583), 115(67), 120, 121(611), 126(3), 130(122), 132(13), 133(40), 142 (Var. *rev.* single cornucopiae, 125), 147(3), 155(164), 156(27), 160(88), 162(23-Antioch), 167(131-Antioch), 173 (*rev.* should read AVGVSTI; 132-3 Antioch), 179(25-Antioch), 186, 187, 189(37), 194(37), 196(50), 199(28), 203(33), 205(33), 210(128), 212(38), 216(90), 226(39), 237(48), 242(41), 250(350), 253(333), 261(218), 264(5-Antioch), 266(229), 272(32), 276(56), 280(5-Antioch), 296(219), 298(22), 299(128), 299 (Var. *obv.* IMP CAES M ANT GORDIANVS AVG—Antioch), 302(116-2 Antioch), 302 (Var. *obv.* IMP GORDIANVS PIVS FEL AVG, 2), 306 (Antioch), 307(2-Antioch), 312(102-1 Antioch), 313 (43), 314(136), 319(153), 327(226), 328(27), 336(165), 347, 348(169), 349(15), 353(108), 357(121-1 Antioch), 362 (3-2 Antioch), 375(3-Antioch), 380(3-Antioch), 381(132), 381 (Var. *obv.* IMP GORDIANVS PIVS FEL AVG), 383(106), 386(35), 388(128), 404(552), and the following three coins not described in Cohen :

(1) *Obv.* IMP GORDIANVS PIVS FEL AVG, bust radiate, draped, r.

Rev. FIDES EXERCITVS. Four standards.

(2) *Obv.* IMP GORDIANVS PIVS FEL AVG, bust radiate, draped, r.

Rev. LAETIT FVNDAT, Laetitia standing l., holding wreath and rudder.

(3) *Obv.* IMP GORDIANVS PIVS FEL AVG, bust radiate, draped r.

Rev. SECVRITAS PERPETVA, Felicitas standing l., holding long caduceus and cornucopiae.

SABINIA TRANQUILLINA. 2. C. 1, 4.

PHILIP I. 4,939. C. 3(155), 9 (*rev.* should read **AVGG**, 526), 12 (*rev.* should read **AVGG**, 83), 17(93), 25(411), 32(99), 33(91), 39(37), 43(151), 49(42), 50(113), 50 (*Var. obv.* **IMP M IVL PHILIPPVS AVG**), 54(26), 55(98), 58(23), 58 (*Var. rev.* Fides holds sceptre and transverse standard), 65(34), 72(11), 72 (*Var. rev.* Laetitia holds wreath and sceptre), 80(132), 81(29), 87(178), 98(27), 102(102), 103(35), 103 (*Var. obv.* **IMP PHILIPPVS AVG**), 109(21), 113(17-Antioch), 114 (Antioch), 117, 120(151), 123(5), 124(191), 136(118), 137(67), 145(37), 147(6), 147 (*Var. obv.* **IMP M IVL PHILIPPVS AVG**), 155, 156, 156 (*Var. obv.* **IMP PHILIPPVS AVG**), 165(4), 165 (*Var. obv.* **IMP PHILIPPVS AVG**), 169(375), 170(126), 171(94), 173(62), 178(56), 182(56), 185(4), 187(12), 189(60), 193(135), 198(88), 199, 205(18), 209(29), 209 (*Var. rev.* **SALVS AVGG**, 2), 215(167), 221(24-Antioch), 223(29), 227(127), 231(43), 235(75), 238(5), 239(53), 240(98), 241(39), 244(27-Antioch), 245(7-Antioch), and the following three coins not described in Cohen:

(1) *Obv.* **IMP M IVL PHILIPPVS AVG**, bust radiate, draped, cuirassed, r.

Rev. **LIBERALITAS AVG**, Liberalitas standing l., holding *abacus* and cornucopiae.

(2) *Obv.* **IMP M IVL PHILIPPVS AVG**, bust radiate, draped, cuirassed, r.

Rev. **PROVIDENT AVG**, Providentia standing l., holding wand over globe and vertical sceptre.

(3) *Obv.* **IMP M IVL PHILIPPVS AVG**, bust radiate, draped, cuirassed, r.

Rev. **VOTIS DECENNALIBVS**, in wreath.

OTACILIA SEVERA. 1,001 (with one denarius). C. 1, 4(370), 9(11), 16(80), 17(102), 20(54-Antioch(?)), 21(3), 30(6), 34(7), 37(9), 37 (*Var. rev.* **PIETAS AVGG**), 39(26), 42(2), 43(114), 43 (*Var. obv.* **M OTACIL SEVERA AVG**), 49, 52, 53(133), 53 (*Var. obv.* **M OTACIL SEVERA AVG**, 5), 63 and 64 (*rev.* essentially the same, 73), and one coin with uncertain reverse.

PHILIP II. 1,050. C. 6(39), 13(26-Antioch(?)), 17(111), 23(114), 24(5), 32(9), 48(385), 54(132), 57(98), 57 (*Var. obv.* **IMP PHILIPPVS AVG**), 58(3)⁴, 59(17)⁵, 61(11), 72(62), 84(5), 88(32).

⁴ In this variety of reverse, the soldier holds vertical spear.

⁵ In this variety of reverse, the soldier is probably always

TRAJAN DECIUS. 1,366. C. 2(111), 2 (Var. *obv.* IMP CAE TRA DEC AVG),⁶ 4(144), 6(5), 6 (Var. *obv.* IMP CAE TRA DEC AVG),⁶ 13(9), 16(248), 25(3),⁶ 26(3),⁶ 27(15), 32(6),⁶ 33(9),⁶ 34(5), 43(14),⁶ 44(13),⁶ 45, 46(18), 49(214), 50, 51,⁶ 51 (Var. *obv.* IMP CAE TRA DECIUS AVG),⁶ 56(12), 57,⁶ 63(14), 64(13), 77 (Var. *rev.* Libertas holding pileus and vertical sceptre),⁶ 79(6), 80(7), 81(12), 82(8),⁶ 83(9),⁶ 86(159), 86 (Var. *rev.* both the Pannoniae look l.), 86 (Var. *rev.* the two Pannoniae stand close together, with standard between them: the one on l. holds no standard), 86 (Var. *rev.* the Pannonia on l. holds standard in l. hand), 91(14), 92(8), 105(132), 111(6), 111 (Var. *obv.* IMP C M Q TRAIANVS DECIVS AVG, 143), 122,⁶ 123(3), and one coin not described in Cohen:

Obv. IMP CAE TRA DECIUS AVG, bust radiate, cuirassed, r.

Rev. FECVNDITAS AVG. Feconditas standing l., holding out hand to child on l. who stands r., and holding cornucopiae in l. hand.

CONSECRATION COINS OF THE "DIVI". 85.

AUGUSTUS. 13. C.⁷ 577(1), 578(12).

VESPASIAN. 11. C. 651(4), 652(7).

TITUS. 4. C. 404(2), 405(2).

NERVA. 1. C. 153.

TRAJAN. 15. C. 664(14), 666(1).

HADRIAN. 2. C. 1510(2).

intended to be carrying a transverse spear, but it is normally hidden behind the bodies.

⁶ The coins thus marked all show the short forms of legend, IMP CAE TRA DEC (or DECIUS) AVG, and certainly stand in a class by themselves. We attribute them to the Mint of Milan (see Mattingly, "The Mint of Milan", *Numismatika*, 1936, p. 12). Laffranchi has attributed them to Viminacium (*Riv. It.*, 1908, pp. 199 ff.) and Alföldi (as we learn by letter) inclines to attribute them to Rome as the last issue of the reign.

⁷ The "Cohen" numbers in each case refer to the Emperor consecrated. The series used to be attributed to the reign of Gallienus, but is now known to belong to that of Trajan Decius (cf. Mattingly and Salisbury, "A Find of Roman Coins from Plevna in Bulgaria", *Num. Chron.*, 1924, pp. 210 ff.). The style is that of the coins with the short legends, IMP CAE TRA DEC (or DECIUS) AVG—in our view, Milan.

ANTONINUS PIUS. 24. C. 1188(3), 1189(21).

COMMODUS. 8. C. 1009(2), 1010(6).

SEPTIMIUS SEVERUS. 2. C. 799(2).

SEVERUS ALEXANDER. 5. C. 597, 598(2), 599(2).

HERENNIA ETRUSCILLA. 518. C. 8(44), 11(11), 14(42), 17(142), 19(277), and two coins not described in Cohen :

(1) *Obv.* HER ETRVSCILLA AVG, bust diademed, draped r., on crescent.

Rev. ABVNDANTIA AVG. Abundantia standing r., emptying cornucopiae held in both hands.

(2) *Obv.* HER ETRVSCILLA AVG, bust diademed, draped r., on crescent.

Rev. PVDICITIA AVGG, Pudicitia seated l., raising veil from face and holding sceptre.

HERENNIUS ETRUSCUS. 270. C. 4(23), 7 (Var. *obv.* Q HER ETR MES DECIVS NOB C), 8(3), 9 (Antioch), 11(54), 11 (Var. *obv.* IMP C Q HER ETR MES DECIO AVG), 14(47), 20(2), 20 (Var. *rev.* PRINCIPI IVVENTVTIS, 36). 26(54), 32, 32 (Var. *obv.* Q HER ETR MES DECIVS AVG), 38(44), 40 (Antioch), 41.

HOSTILIAN. 82. C. 6(3), 10, 12(7), 13, 13 (Var. *obv.* VALES, 2), 15(25), 15 (Var. *obv.* IMP C MES QVINTVS AVG), 20, 22 (Var. *obv.* IMP C MES QVINTVS AVG; *rev.* PIETAS AVGG), 25(3), 29 (Var. *obv.* C VALENS HOSTIL MES QVINTVS N C, 2), 34(29), 43 (Antioch), 57(4), 61.

TREBONIANUS GALLUS.⁸ 769. C. 6(2), 13(19), 17(20), 20(45), 25 (but A), 25 (but A: *rev.*, no star), 29 (but Roman fabric), 33, 34(2—Antioch), 34 (Var. *obv.* IMP C C VIB TREB GALLVS AVG—Milan, 2), 37 (*rev.*, star, 25), 37 (*rev.*, no star, 56), 41(38), 46 (*obv.* IMP CAE C VIB TREB GALLVS AVG, 2), 46 (*obv.* IMP C C VIB TREB GALLVS AVG, Milan, 43), 47 (5—Antioch: in ex. . . , IV, VI, blank, one uncertain), 56(2), 63 (*rev.*, star, 26),

⁸ The coins of Trebonianus Gallus of Rome are characterized by *obv.* legend, IMP CAE C VIB TREB GALLVS AVG: those of Milan by *obv.* legend, IMP C C VIB TREB GALLVS AVG: those of Antioch by *obv.* legend, IMP C C VIB TREB GALLVS P F AVG. The *obv.* legend of C. 118, GALLVS PIVS AVG, is quite exceptional—probably of Rome. Mint-marks—dots or Roman numerals in ex.—occur only at Antioch.

- 63 (*rev.*, no star, 58), 67(44), 68(54-Milan), 69(3), 70 (Antioch), 71(12), 72(3-Antioch: one with . . . in ex.), 76(64-Milan), 77, 77 (*rev.* star), 80 (*rev.* PAX AVG VG (*sic*)-Antioch), 81 (Antioch), 84 (*rev.*, star, 20), 84 (*rev.*, no star, 86), 85 (Milan), 88(63-Milan), 88 (Var. *obv.* IMP CAE C VIB TREB GALLVS AVG, 2), 102(8), 103(6), 103 (Var. *obv.* IMP C C VIB TREB GALLVS AVG, Milan), 108(4-Antioch: in ex., ., . . ., blank), 111(1-Antioch: in ex. VI), 114(3), 117(5), 118, 121(2), 125(3-Antioch), 127 (Antioch), 128(23), 131(2), 133(2-Milan), 136.
- VOLUSIAN.⁹ 632. C. 8(27), 14, 20(71), 25 (*rev.*, star, 26), 25 (*rev.*, no star, 56), 32(62-Milan), 39(4), 40 (Var. *AR*; *obv.* radiate, draped r.; *rev.* Juno holds two corn-ears?), 43(13, including three with star on *rev.*), 43 (Var. *rev.* tetrastyle temple), 44(2), 45(5), 47, 48 (Var. *rev.* two small round objects l. and r. of goddess: "children"?), 55, 61 (Antioch), 70(77), 71(31), 73, 85(2), 88(35), 92(26), 94(28), 100, 101(3), 113 (Antioch: in ex., . . .), 118(42), 118 (Var. *obv.* IMP CC VIB VOLVSIANVS AVG, Milan), 126 (Antioch), 131, 133(37), 135 (*rev.*, star, 26), 135 (*rev.*, no star, 33).
- AEMILIAN. 50. C. 2(4), 10(4), 13(5), 16, 17,¹⁰ 22, 25(6), 26(5), 26 (Var. *obv.* IMP CAES AEMILIANVS P F AVG, 2),¹⁰ 32, 41(4), 47(4), 52,¹⁰ 53(4), 59(3),¹⁰ 60(4).
- CORNELIA SUPERA. 2. C. 3, 5.
- VALERIAN I. 346. C. 3, 17(21), 18(4), 25(24), 26, 31(2), 36(2-Milan), 38(2), 47, 53(21), 55(4), 61 (Antioch), 65(26), 68, 71 (Milan), 74(2-Milan), 77 (Lugdunum), 83(2), 83 (Var. *obv.* IMP C P LIC VALERIANVS P F AVG), 94(12), 104(2), 105(2), 108(4), 113, 119(4), 135, 142 (Milan), 143(3-Milan), 145 (Antioch), 147(4-Milan), 150, 156(5),

⁹ The coins of Volusian of Rome are characterized by *obv.* legend, IMP CAE C VIB VOLVSIANO AVG: those of Milan by *obv.* legend, IMP C C VIB VOLVSIANVS AVG: those of Antioch by *obv.* legend, IMP C V AF GAL VEND VOLVSIANO AVG (less commonly IMP CC VIB VOLVSIANVS AVG). Mint-marks—dots or Roman numerals in ex.—occur only at Antioch.

¹⁰ Aemilian in his short reign of three months has two *obv.* legends:—(1) IMP CAES AEMILIANVS P F AVG, (2) IMP AEMILIANVS PIVS FEL AVG; both legends, however, seem to belong to the mint of Rome. Those with *obv.* 1 are here marked ¹⁰.

166(2), 175, 188 (Antioch), 194 (Var. *rev.*, star r., Milan), 197(21), 200 (Milan), 201 (Milan), 203 (Milan), 204(6-Milan), 205 (Milan), 208(5-Milan), 209 (Milan), 211(2-Milan), 221(2), 224(16), 225, 230(62), 231(2), 244, 257(5-Milan), 261 (but *Ar*-3), 265(2-Milan), 272(4-Milan), and the following numbers, placed by Cohen, in error, under Valerian II: C. 6(37-Lugdunum), 9 (Lugdunum).

MARINIANA, DIVA. 20. C. 2(5), 3(5), 11, 14(9).

GALLIENUS. 346. C. 65, 118 (Milan), 123, 125(7), 131(23), 236, 236 (Var. *obv.* **IMP C P LIC GALLIENVS P F AVG**), 253(5-Lugdunum), 308(79-Lugdunum), 310(14-Lugdunum), 312(3-Lugdunum), 314(5-Lugdunum), 351(21), 370, 397 (Lugdunum), 398 (Lugdunum), 399(5-Lugdunum), 437(2), 441, 566, 567 (Milan), 571(3), 750 (Milan), 754(17), 797, 803, 806(10), 888(20), 889(3), 895 (Lugdunum), 905 (Lugdunum), 908 (Lugdunum), 933 (Milan).
 • 940(6-Milan), 941 (Var. *obv.* **IMP GALLIENVS P F AVG**, Milan), 990 (Milan), 994 (Milan), 1045 (Lugdunum), 1051 (Lugdunum), 1053 (Lugdunum), 1055(2-Lugdunum), 1056 (Lugdunum), 1062(19-Lugdunum), 1065(3-Lugdunum), 1066 (Lugdunum), 1138, 1143(2), 1176 (Var. *obv.* **GALLIENVS AVG GERM V**, radiate, cuirassed l., with shield and spear), 1198(2-Lugdunum), 1206 (Lugdunum), 1274(11-Lugdunum), 1284(6), 1288 (*rev.* spear in l. hand, 44), 1289 (*rev.* spear in l. hand), 1309(3-Lugdunum), and one coin not described in Cohen:

Obv. **IMP GALLIENVS P AVG**, bust radiate, draped r.

Rev. **CONCOR EXERC**, Concordia standing l., sacrificing out of patera over altar and holding cornucopiae (Milan).

SALONINA. 110. C. 58(4), 60(33), 78(5), 84, 98(2), 115(34-Lugdunum), 130(18), 137(3), 142(10-Lugdunum).

VALERIAN II. 36 (under Saloninus in Cohen). C. 26(21-Lugdunum), 29(5), 50(4), 52 (Lugdunum), 66 (Lugdunum), 81(4).

Though, as we have noted above, something less than the grand total of the hoard is recorded in our lists, the general picture that they give is certainly a correct one. The only reserve to be made is that the commonest types of Gordian III and the Philips were even more strongly represented than appears from

our figures, since the coins left uncleaned belonged predominantly to them. The figures are eloquent and impressive. The coins are massed most heavily on the reign of Gordian III—8,892 coins for something under six years. There is a gentle drop to the reigns of Philip I—6,990 coins for about five and a half years—and Trajan Decius—about 2,300 coins for a little less than two years. Then follows a sharp drop to Trebonianus Gallus—just over 1,400 coins for less than two years—and Aemilian—50 coins for about three months. The reign of Valerian I and Gallienus, A.D. 253 to 257, has only 858 coins to show for something under four years. Earlier than Gordian III the coinage is light and not closely representative. There is a fair series of Balbinus and Pupienus, but behind them stretches a wide gap, as far back as Elagabalus—mainly due to the fact that our hoard is essentially one of antoniniani and only admits denarii in vanishingly small quantities—sixteen among so many thousands! The coins, as a whole, showed very little trace of wear. If specimens of Caracalla or Elagabalus were often more or less worn, from Balbinus and Pupienus onwards mint condition was frequently to be noted. The meaning of this curious phenomenon will be discussed later in connexion with the subject of die-identities. The rare coins of the period remain unrepentantly rare. There were only two specimens of Tranquillina and two of Cornelia Supera. Quite unexpected rarity, however, was revealed for an occasional issue of Gordian III and Philip, marked as "common" by Cohen, but represented by only one or two specimens in our great hoard. The latest dated coin was of A.D. 257 (Valerian, C. 166, P M TR P V

COS III P P) and several other indications—the absence of any “consecration” coins of Divus Valerianus Caesar, of any coins of Saloninus, and of any of the issues of Rome with officina letters in field—all suggest the same date. Whether the hoard went into the ground as soon as its latest coins reached Dorchester or at some later date is a question of some interest to which we shall later recur.

Though, in the absence of any definite indications, we are bound to remain uncertain of the exact meaning of our hoard, we can say at once that it exceeds the usual limits of a private hoard and seems to belong rather to the class that has often been designated, with more boldness than wisdom, “army-chest”. A real “army-chest” that deserved the name would run beyond the proportions of even such a hoard as ours, nor can there be any question at Dorchester of a serious military garrison. It will be safer to regard our hoard as some kind of a bank, whether private or official we have no means of deciding. It is to be compared with the major hoards, of which Blackmoor Park in Hampshire, England,¹¹ Venera in Italy,¹² Réka Devnia in Bulgaria,¹³ and a recent Balkan hoard of vast proportions may be taken as examples.

Hoard of composition similar to ours seem to be comparatively rare; we may instance the hoards of Couvron (*Annuaire de la Société numismatique française*, 1878–1881, pp. 456 ff.; Caracalla–Valerian I), Bolar (*Rev. Num.*, 1931, pp. 242, 243; Albinus–Gallienus), Sig-

¹¹ *Num. Chron.*, 1877, pp. 90 ff.

¹² *Il Ripostiglio della Venèra*, L. Milani, Rome, 1880.

¹³ *Le Trésor Numismatique de Réka-Devnia* (Marcianopolis), N. A. Mouchmov, Sofia, 1934.

may l'Abbaye (*Rev. Num.*, 1865, pp. 375 ff.; Commodus-Gallienus), and Smederevo (*Starinar*, Belgrade, 1931, pp. 32 ff.). From Britain itself it is hard to quote a single close parallel—at least among hoards at all adequately recorded. The nearest example seems to be that of Edlington Wood, Doncaster (*Num. Chron.*, 1935, pp. 202 ff.), which contained antoniniani from Elagabalus to Gallienus: allowing for the very much smaller numbers, we find a distinctly similar distribution. In that case, however, Miss Robertson, who published the hoard, considered that it must go together with a second hoard found on the same site, which comprised denarii only from Septimius Severus to Gordian III. If this view is correct, as on the evidence it should be, there is an interesting discrepancy between Edlington Wood and Dorchester. In the former, antoniniani and denarii are hoarded together, but in separate containers, in the latter, hardly any denarii survive, except those overstruck as antoniniani! But the denarius, on the evidence of Edlington, would still survive in Britain the restriking of Trajan Decius.

In this context another hoard should be noted, that is preserved without note of site in the British Museum, and has never yet been published. Its composition is as follows:—

	<i>Denarii</i>	<i>Antoniniani</i>
SEPTIMIUS SEVERUS	6	
JULIA DOMNA	4	
GETA	1	
ELAGABALUS	9	1
JULIA SOAEMIAS	1	
JULIA MAESA	4	
SALLUSTIA ORBIANA	1	
GORDIAN III	3	45

	<i>Denarii</i>	<i>Antoniniani</i>
PHILIP I		29
PHILIP II		4
OTACILIA SEVERA		6
TRAJAN DECIUS		13
HERENNIA ETRUSCILLA		9
HERENNIUS ETRUSCUS		1
TREBONIANUS GALLUS		12
AEMILIAN		2
VALERIAN I		29
GALLIENUS		74
SALONINA		36
VALERIAN II		29
	<u>29</u>	<u>290</u>

With the silver was found one as of Tiberius of Lugdunum. There were very few Eastern issues, but a sprinkling of Milan coins and a large number of Lugdunum issues of the reign of Valerian I and Gallienus. The general composition is comparable to that of Dorchester, but we note the presence of a fair proportion of denarii, the peak not earlier than Valerian, and the importance of the mint of Lugdunum in his reign. Everything points to a Gallic site for the hoard at a date much the same as for Dorchester.

What really constitutes the individuality of our hoard is that it represents in mass the Antoninianus of the second great issue that began with Balbinus and Pupienus and rapidly ousted the denarius from circulation. It represents a coinage that can still, with some show of reason, claim to be silver: though steadily declining in quality, it yet stops short of the catastrophic collapse of the years A.D. 258-259. The actual value in metal of the individual coins varies very widely from the beginning to the end of the hoard. Yet the fact that they are hoarded together,

while the subsequent debased coinage is excluded, strongly suggests that they all passed in currency at a value certainly above the silver value of the best of them. Up to A.D. 258-259 the business world maintained its confidence in the stability of the silver coinage. It was only then, when floods of debased metal swept the markets, that the holders of the older and better silver began to protest. Reluctant to surrender it they committed it to the safe-keeping of Mother Earth, till better times should return. We have no record of the legislation that accompanied the debasement of the silver. It is likely enough that the hoarding of the better silver was expressly forbidden, and that those hoarding did so at their peril. The survival of a hoard like ours may have been due to an "accident" which overtook the owner—an accident more likely to be due to the Roman government than to any marauder in quest of loot.

The latest coins in our hoard, as we have seen, can hardly fall beyond the year A.D. 257. The great debasement is naturally attributed to the sudden and disastrous crisis that followed the captivity of Valerian; it may certainly have begun before it, but will hardly have reached its climax till afterwards. The first issues of debased coins may have caused little uneasiness; it was their issue, in masses to swamp the markets, that swept away public confidence. On the old and troublesome controversy over the dates of Valerian I and Gallienus our hoard throws no new light. It still seems most probable to the writer that the captivity of Valerian I falls in A.D. 258, the revolt of Postumus in A.D. 258 (end)-259, that the first Alexandrine year of Valerian I was A.D. 252-253 (not 253-254)

and that the last year of Valerian II (€) was therefore A.D. 256-257 (not 257-258). The evidence of our hoard does not decide between this and the contrary view. All that can fairly be said is that our view brings the burial of such a hoard as Dorchester into satisfactorily close contact with the debasement of the coinage, in a way that the other view that delays the critical disaster till A.D. 260 does not. In any case, there is no certainty that the hoard actually went into the ground in the year of its latest coin. The time-lag, however, in this case need have been no long one: for, if the good silver were once threatened, why waste time in getting it into a place of safety?

Apart from its own individual problems the Dorchester hoard provides interesting evidence on several points of more general interest. We will deal first with one or two of more restricted importance, and then come to two that are of critical value for our knowledge of Roman third-century coinage—the over-strikes of Trajan Decius and the working of officinae in the Mint.

We begin with a few points, relating to Empresses, enjoying the right of coinage. Julia Maesa, grandmother of Elagabalus, is represented by seven antoniniani, whereas neither his mother, Julia Soaemias, nor any of his three wives appears. As far as our hoard is concerned, this might be due merely to accident. But, on looking further into the matter, we find that the superior denomination, the antoninianus, was only struck for Julia Maesa, not for the other imperial ladies, just as later, in A.D. 238, the young Caesar Gordian III, was only represented on the denarius, while Balbinus and Pupienus issued

antoniniani in mass. This distinction of grades of numismatic privilege is, of course, familiar enough in English coinage, but does not yet seem to have been noted with any close attention in Roman.

Cornelia Supera [Pl. III. 14], with only two antoniniani in the hoard, is as rare an Empress as we have been taught to think her. It is obviously more probable that she is the wife of Aemilian, with his 50 coins, than of Trebonianus Gallus, with his 769.

Sabinia Tranquillina [Pl. III. 13], wife of Gordian III, was likewise represented by two specimens—a much higher degree of rarity in view of the immense issues of her husband. The daughter of the great praetorian prefect, Timisitheus, she married the young Emperor in A.D. 242 and accompanied him on his eastward journey towards Syria, receiving honours on the coins of quite a large number of cities. She certainly did not die within any very short interval after her marriage and some exceptional cause may reasonably be sought for the rarity of her coins. Such a cause is not hard to find. Timisitheus, as praetorian prefect, was virtually guardian of the young Gordian. When he died in A.D. 243 and was succeeded by Philip the Arab, it was equivalent to a change of government. Philip was certainly an enemy of Timisitheus and was even accused of his murder; that he was responsible for the death of Gordian III a few months later cannot be doubted.¹⁴ Whether Tranquillina actually died in the ruin of her house cannot be known for certain. What is extremely probable is that Philip, out of hatred for his dead rival, called in the coins of the daughter. Such a measure would be prosecuted

¹⁴ *Historia Augusta*, Gordianus Tertius, ch. 28.

with vigour for a few years and then fall into neglect: that would explain the survival of a few strays like ours. That the local coinage of *Tranquillina* was not similarly attacked need not, in view of its minor importance, surprise us.

The appearance of 83 specimens of the series of "Divi", consecrated Emperors from Augustus to Severus Alexander, in itself adds nothing to our previous knowledge; but the fact that one of them, an Augustus, was overstruck on an earlier denarius absolutely confirms the conclusion reached in an article on the Plevna hoard,¹⁵ that the series was issued by Trajan Decius and Trebonianus Gallus. It is to those two reigns that all such overstrikes belong. Further evidence, if such is still needed, may be drawn from the weights.¹⁶

The representation of the various mints in our hoard may be studied to some little advantage. Rome, as is natural, predominates throughout. Of Antioch coins, in the characteristic local style,¹⁷ we find a stray specimen here and there—of Gordian III, Trajan Decius, or Trebonianus Gallus. But of the great branch-mint of Antioch,¹⁸ opened by Gordian III and continued for a time by Philip I, to reinforce the mint of Rome, we have ample issues for both reigns. In both cases there was considerable similarity among the dies in use and actual identities

¹⁵ *Num. Chron.*, 1924, pp. 210 ff. especially 235 ff.

¹⁶ See below.

¹⁷ Neither for Gordian III nor Philip I does the characteristic head to left appear.

¹⁸ See Pink in *Num. Chron.*, 1925, pp. 94 ff. He has proved that this mint is in the East, not at Viminacium, and made it appear highly probable that its site was Antioch.

of die were observed. The important new mint of A.D. 250-251, regarded by Laffranchi as "Viminacium" (new style), but more probably to be regarded as the first stage of the mint of Milan,¹⁹ is well represented, especially under Trebonianus Gallus. The coins of Aemilian in our hoard are all of the mint of Rome; his absence from the Milan series is both natural and significant. For Valerian I and Gallienus we have scanty issues from Milan, a few strays from the East, and fairly generous representation of the new mint of Lugdunum.

It was impossible, owing to pressure of time and work, to study the question of dies as fully as could have been desired. The first careful examination revealed that great masses of coins, closely similar in general style and of uniformly fine condition, were here accumulated. Wherever a closer search was made—notably in the **SAECVLARES AVGG** issues of Philip I and his family—actual die-identities soon began to occur. The proportion was something very near to 5 identities for 100 coins. This is obviously higher than could reasonably be expected for any 100 coins, swept in from general circulation. If we remember also the uncirculated condition of many of our coins, after ten years and more of life, we can conclude with certainty that our hoard consists essentially of "bank"-money, money which has never seen service for any time in general circulation, which has in fact, never been dispersed from the time that it

¹⁹ Cf. "The Mint of Milan", in *Numismatika*, Zagreb, 1937, pp. 1 ff. Laffranchi in *Riv. It.*, 1908, pp. 199 ff. It will become apparent in our study of the organization of the mint that none of these issues can be attributed to Rome.

left the mint. It is most curious to note, in the case of Eastern issues of Philip I, where lack of circulation and die-identities were again observed, that money could actually travel, by "bank" circulation only, from East to West of the Empire. We seem to have before us a very definite hint as to the meaning of a phenomenon, so often observed in hoards—the lack of wear at all proportionate to the age of many of the coins. Sir George Macdonald, in discussing the Falkirk Hoard,²⁰ suggested successive stages of deposit as the cause; but with all deference to his great authority we hardly think that his explanation is sufficient as a general explanation of a feature so common. Should we not make a clear distinction between—

- (a) ordinary money in circulation, which shows wear proportionate to age; and
- (b) "bank"-money, which might remain for decades withdrawn from circulation or only circulating feebly between bank and bank?

The latter class would naturally be well represented in hoards, which, after all, represent in themselves something like private banks.

The decline and fall of the antoninianus may be observed with painful precision throughout a large part of its course. We base our results on the specimens selected for the Museum, which are numerous enough to be representative: only for Caracalla and Elagabalus were the numbers too small to justify confidence in the result, particularly as the coins of the former showed more signs of wear.

²⁰ *Num. Chron.*, 1934, pp. 166 especially pp. 22 ff.

	<i>Average weight</i>	<i>No. of Specimens</i>	<i>Highest</i>	<i>Lowest</i>
Caracalla	75.8	6	—	—
Elagabalus	78.7	25	—	—
Balbinus and Pupienus	70.8	19	84.3	47.0
Gordian III	67.1	567	100.0	40.4
Philip I and family	62.9	711	99.8	33.2
Trajan Decius and family	58.1	594	123.2	35.7
Trebonianus Gallus and Volusian	54.2	414	86.4	27.9
Aemilian	53.5	43	72.8	43.0
Valerian I and family	49.3	409	85.7	27.0

Antioch issues of Gordian III and Philip I were in both cases slightly above the Roman average. The Milan coins of Trajan Decius were slightly above, those of Antioch definitely below the Roman average. The coins of the "Divi", here included among the issues of Trajan Decius, showed an average of 56.9, distinctly lower than his, yet higher than the average of the next reign—a clear indication that they overlap the two reigns. For Trebonianus Gallus Antioch was appreciably, Milan slightly above the norm. For Valerian I Milan was slightly, Lugdunum quite noticeably above the average.

Despite the great range of weights there was little variation in size (0.8 to 1.05 in. represent extreme limits); and as the types, which on Roman coins tend to vary with the denomination, remain constant for heavier and lighter specimens, we must still suppose that we have to do with a single denomination, struck carelessly and *al marco*, not *al pezzo*. The nominal value of the coins presumably exceeded the intrinsic metal value of the heaviest specimens that have survived: otherwise they should have found their way back to the melting-pot. So long as that was the case, only the Government could make a profit, by

withdrawing the heavier specimens and replacing them with lighter: the private entrepreneur could not sell at a profit in the silver market and could only realize a profit by the more dangerous path of direct forgery. In the case of a few, very heavy and thick specimens the question did intrude itself, as to whether these were not double antoniniani, first cousins of the "quaterniones" of ancient and almost legendary fame.²¹ As far as we are concerned, "*adhuc sub iudice lis est*".

Overstrikes of antoniniani of the reign of Trajan Decius on earlier denarii have long been known, but only sporadically, and sufficient importance has hardly been attached to them.²² In this hoard such overstrikes were numerous enough to arrest attention. The lists appended record details of all that could be determined with any accuracy. In addition to these, however, there were some twenty-five other coins which were certainly overstruck, though the under-types could not be recovered. In very many other cases, over a hundred in all, overstriking could be suspected, but not proved. In other cases, it was impossible to say whether suspicious traces were due to overstriking or to double-striking. The coins overstruck range from Septimius Severus to Gordian III, the over-types from the second issue of Trajan Decius to well within the reign of Trebonianus Gallus, including one of "Divus Augustus". One overstrike was suspected, but not proved for Aemilian.

²¹ Cohen, *op. cit.*, vol. v, p. 338, no. 11 (Valerian I and Gallienus).

²² The British Museum had already two examples: (a) *rev.* **PIETAS AVGG**, Mercury, of Herennius Etruscus, overstruck on a denarius of Caracalla; (b) *rev.* **PRINCIPI IVVENTV-TIS**, Apollo seated, of Herennius Etruscus, overstruck on a denarius of Severus Alexander.

CONSPICUUS OF OVERSTRIKES.

TRAJAN DECIVS. TREBONIANUS GALLVS.

<i>Emperor</i>	<i>Obverse</i>	<i>Reverse</i>	<i>Weight in grains</i>	<i>Over-struck on</i>	<i>Evidence</i>
Trajan Decius	IMPCMQTRAIVNS DECIVS AVG	ABVNDANTIA AVG	38.6	Septimius Severus, M. & S. 64. C. 50	Obv. . . SEV PERT Rev. . . ARAB . .
"	illegible	ADVENTVS AVG	49.4	Julia Mamaea. C. 17	Obv. IVLIA MAM . . Rev. . . CITAS PVBLI . .
"	IMPCMQTRAIVNS DECIVS AVG	"	51.0	Severus Alexander. der. C. 501 or 508	Obv. . . ALEX . . . Rev. . . VIDENT . . . [Pl. III. II] AVG
"	illegible	GENIVSEXERC ILLVRICIANI	52.1	Septimius Severus	Obv. . . SEVERVS Rev. PM TR P . .
"	IMPCMQTRAIVNS DECIVS AVG	"	45.3	Elagabalus, C. 276	Obv. . . NINVS . . AVG Rev. SVM . .
"	"	VBERITAS AVG	50.3	? Elagabalus	Obv. . . ON . . . Rev. . . T . . .
"	IMP CAE TRA DECIVS AVG	DACIA FELIX	48.8	Severus Alexander. der. C. 365 (?)	Obv. IMP SEV . . . Rev. PM TR P VIII . .
"	IMP CAE TRA DEC AVG	GEN ILLVRICI	37.5	Severus Alexander. der	Obv. . . A . . . Rev. No traces
"	IMP CAE TRA DECIVS AVG	GEN ILLVRICI	49.4	Severus Alexander. der	Obv. . . SE . . . Rev. . . M . . .
Etruscilla	HER []ILLA AVG	ABVNDANTIA AVG	49.0	Severus Alexander. der ? C. 289	Obv. IMP C . . XAND AVG Rev. PM T . . . COS II . . . [Pl. III. 12]
"	HER ETRVSCILLA AVG	FECVNDITAS AVG	45.7	"Severan"	Obv. . . VG BRIT Rev. Indeterminate traces

"	"	PVDICITIA AVG ("seated" type)	48-3	? Maximus	Obv. IVL . . . Rev. Indeterminate traces
Herennius	Q HER ETR MES DECIVS NOB C	CONCORDIA AVG (clasped hands)	46-9	Geta	Obv. . . . IMIV . . . Rev. No traces
"	Q HER ETR MES DEC . . .	MARTI PRO . . . RI	49-1	Septimius Severus	Obv. . . . RVS PI . . . Rev. No traces
"	. . . TR MES 'DECIO AVG	PIETAS AVGG (Mercury)	57-5	Gordian III	Obv. . . . IANVS PIV . . . Rev. Indeterminate traces
"	Q HER ETR MES DECIVS NOB C	PRINCIPI IVVENTVTIS	51-4	? Julia Domna	Obv. Coiffure of Empress Rev. Figure of Hilaritas
Hostilian	C VALENS HOSTIL MES QVIN . . .	CONCORDIA AVG (clasped hands)	47-3	? Severus Alexander	Obv. Bust and lower part of face Rev. No traces
"	C VAL HOS MES QVINTVS N C	PIETAS AVGG (Mercury)	51-3	Severus Alexander	Obv. . . . X . . . Rev. No traces
"	C VALENS HOSTIL MES QVINTVS N C	PIETAS AV- GVSTORVM	52-8	? Caracalla	Obv. Traces of bust Rev. . . . S AVGG
"	C VALENS HOSTI- LI N C	SPES PVB . . .	48-0	Maximin I. ? C. 37	Obv. . . . AVG GERM Rev. PAX A . . .
"Divi" Series	DIVO AVGVSTO	CONSECRATIO	49-6	Caracalla	Obv. . . . G . . . RM Rev. Indeterminate traces
Trebonianus Gallus	IMP CAE C VIB TREB GALLVS AVG	LIBERTAS AVGG	48-7	Severus Alexander. ? C. 528	Obv. . . . ANDE . . . Rev. STI
"	"	PAX AVGG	53-7	Severus Alexander. ? C. 173	Obv. . . . ALEX . . . Rev. MA . . .
"	"	PIETAS AVGG	44-8	? Geta	Obv. Small bust Rev. Indeterminate traces
Volusian	IMP C C VIB VOLV- SIANVS AVG	FELICITAS PVBL	50-3	Severus Alexander	Obv. . . . R PIVS . . . Rev. Indeterminate traces

In view of the commonness of coins of this period and of such great hoards as that of Plevna, it is remarkable that so few overstrikes have as yet been recorded. Plevna itself showed not a single example, though the low weight and thin flan of some of its antoniniani left little doubt that they had begun life as denarii. The great commonness of overstrikes in our hoard suggests some curious conclusions. Either the overstriking of antoniniani on old denarii was much commoner at some times and places than at others, or it was carried out with very varying degrees of skill. In either case, it is hard to explain our Dorchester overstrikes, if all overstriking was done at one, presumably uniform, mint of Rome. But if the mint of Rome, while central for the production of dies, exported to the provinces not coined silver, but dies to be used at branch mints, we might expect to get exactly what we are observing—unvarying Roman style, varying (and therefore presumably) provincial fabric. Dorchester would suggest that the British mint-workers were clumsier than the average: perhaps also that there were specially large stocks of old denarii, waiting to be re-struck as antoniniani.

What was the meaning of these overstrikes? We can only canvass the bare possibilities here. The antoninianus, introduced by Caracalla as a double denarius in A.D. 215, but not rightly adjusted in weight to the single piece, was designed to drive out its rival. The denarius resisted and, for a time, c. A.D. 219-238, triumphed: the antoninianus ceased to be issued. Balbinus and Pupienus, in desperate need of funds for the campaign against Maximin I, resorted to the antoninianus, as a means of inflation,

and, once restored, it could not again be ousted. The denarius fell into the second place and, after Gordian III, was only issued as an occasional piece, of no importance for general currency. That the old denarii should at this point be called in should not surprise us: that they should be restruck into antoniniani adds something fresh to our knowledge. As we know nothing of the legislation that must have accompanied these reforms, we are free to consider rival theories as to their meaning. We might suppose, on the one hand, that the antoninianus retained its original value of two denarii, at the old rates to the aureus and pound of gold, and that this restriking is yet another piece of inflation. On the other, we might claim that the antoninianus had fallen in value relative to gold, and that the double piece was only worth now what the single piece had been. In that case, the old denarius, of twenty-five to the aureus, would need to be restruck as double denarius, if it were not to lose half its real value. It has been already conjectured, on the basis of some scraps of evidence, which are probably trustworthy, that by the time of Philip, the denarii had dropped from 25 to about 65 to the aureus.²⁴ This would fit in very well with the second theory about our overstrikes, and for this reason we incline to prefer it. As the denarius was still struck in some quantities in the reign of Gordian III, we shall be inclined to plan the drop in tariff under Philip I: the official reduction would, of course, be no more than the recognition

²⁴ Fr. Heichelheim, "New light on currency and inflation in Hellenistic-Roman Times", etc., *Economic History*, February 1935, p. 7.

of what had for some time been taking place in the markets. The real damage must have begun with the inflation under Balbinus and Pupienus. In view of the fresh evidence supplied by our hoard, a reconsideration of the whole question in a wider setting is urgently required.

The Dorchester hoard, by its very magnitude, permits us an unwonted look into the inner working of the mint. It shows us the types that bore the main weight of the coinage, distinct from those that were more ornamental and occasional in character; it also permits us to grasp the exact styles characteristic of those dominant types and so to assign them to their correct places in the system of the mint. We have long known that the mint of Rome was working in six officinae at the end of the reign of Philip I and again under Valerian I and Gallienus, A.D. 258. It becomes clear from a study of Dorchester that the same system was at work as early as Balbinus and Pupienus, and, further, as we push on into details, that each officina normally struck one main type at a time and that types were changed on an average twice a year. We may begin to hope to recover that simple plan of the Roman coinage that Dr. Pink has postulated and reconstructed with so much skill and success.²⁵ We cannot omit a short consideration of the evidence here: for its full exploitation much longer and more elaborate studies will be required.

We begin with Balbinus and Pupienus in the great

²⁵ *Der Aufbau der römischen Münzprägung in der Kaiserzeit*, in *N.Z.*, 1933 ff. It may perhaps be questioned whether the regularity of the system continued to be perfect in the case of the rarer and smaller issues, notably those of gold in some reigns.

issue of antoniniani of the "Clasped Hands" type. Balbinus strikes three types in three officinae:

**CONCORDIA AVGG, FIDES MVTVA AVGG,
PIETAS MVTVA AVGG [Pl. II. 1-3],**

Pupienus three more types in the remaining three officinae:

**AMOR MVTVVS AVGG, CARITAS MVTVA AVGG,
PATRES SENATVS [Pl. II. 4-6].**

The only variation in the issue is a change in the obverse legend of Pupienus, which has nothing to correspond to it for Balbinus.

* We advance directly to the first issue of Gordian III (c. July, A.D. 238 to end of year)—distinguished by early obverse legend and delightful portraits, that "put a young head on old shoulders". The types are **PAX AVGVSTI, PROVIDENTIA AVG, VICTORIA AVG** [Pl. II. 9-11] following Balbinus, and **FIDES MILI•TVM, IOVI CONSERVATORI, VIRTVS AVG** (spear and shield) [Pl. II. 7, 8, 12] following Pupienus.

The fact that we can distinguish "Balbinus" from "Pupienus" portraits of Gordian III strongly suggests that each officina had its own recognizable nuance of portraiture. For the moment we are content to trace successive issues in six officinae, without attempting to give numbers to them. For our present purpose we neglect, as we have a right to neglect, all but the main reverse types. The sequel for Gordian's reign may be set out in the lists following:

Issue 2. Early A.D. 239. P M TR P COS II, throughout, with types of issue 1, Fides Militum, Iovi Conservatori, Pax Augusti, Providentia Aug, Victoria Aug, Virtus Aug (spear and shield) [Pl. II. 13, 14, III. 1-4].

Issue 3. Later A.D. 239. AEQVITAS AVG, CONCORDIA AVG, LIBERALITAS AVG II, P M TR P II COS P P (Emperor sacrificing), ROMAE AETERNAE, VIRTVS AVG (branch, shield, and spear) [Pl. III. 5-10].

So far the obverse legend has been IMP CAES M ANT GORDIANVS AVG.

Issue 4. A.D. 239-240. Repeats the types of issue 3 with new obverse legend, IMP CAES GORDIANVS PIVS AVG.

Issue 5. A.D. 240. Has a new obverse legend IMP GORDIANVS PIVS FEL AVG, with the same set of reverses, only slightly varied,

AEQVITAS AVG, CONCORDIA MILIT, LIBERALITAS AVG II, P M TR P II COS P P (Emperor sacrificing), ROMAE AETERNAE, VIRTVS AVG (branch, shield, and spear).

CONCORDIA AVG & VIRTVS AVG (spear and shield) of issues 2 and 3, still occur, but rarely.

LIBERALITAS AVG III follows II, P M TR P III COS P P follows P M TR P II COS P P. The absence of II after COS proves that we are still in A.D. 240.

Issues 6-9. A.D. 241-242, 3. AETERNITATI AVG, IOVI STATORI, LAETITIA AVG, P M TR P III (III, V), COS II P P (Emperor standing r.) P M TR P III (III, V) COS II P P (Apollo seated l.) VIRTVTI AVGVSTI.

P M TR P III COS II P P (Emperor sacrificing) seems to belong to the first of these issues. IOVIS STATOR is a much rarer variant of IOVI STATORI. A large issue of denarii, connected by Voetter with the marriage of Gordian III to Tranquillina, falls within this same period. The place of the dated coins is at once assured. The place of the four other great types beside them is proved by close comparison of their portraits with the portraits of these and later dated issues.

Issues 10-12. A.D. 243, 244.

FELICIT TEMP

FELICIT TEMPOR

FELICITAS TEMPORVM

MARS PROPGV

MARS PROPGVNAT

MARTEM PROPGVNATOREM

FORT REDVX

FORTVNA REDVX

PM TRPV (VI, VII) COS II PP (Emperor standing r.),
 PM TRPV (VI) COS II PP (Apollo seated l.)

PROVID AVG	SECVRIT PERP
PROVIDENT AVG	SECVRIT PERPET
PROVIDENTIA AVG	SECURITAS PERPETVA

VICTOR AETER
 VICTORIA AETER
 VICTORIA AETERNA

The five types, with three legends of varying length, seem to run concurrently in five officinae. The dated types, which are not very common in this period, might then be placed together in the sixth officina. The remaining type, **FORT REDVX**, is redundant, and would have to be accommodated, probably at the beginning of this period, in one of the other officinae.

From what we have said it will be equally clear that a system exists and that we cannot yet recover it with certainty at all points. The coinage of Tranquillina, if, as we have conjectured, it was originally of some considerable extent, would involve some disturbance of our system. It would hardly appear that the whole of an officina can have been allotted to her.

Of the Antioch mint of Gordian III it is perhaps too early to speak. The earlier issues, with obverse legend, **IMP CAES M ANT GORDIANVS AVG**, are not yet sufficiently known to be arranged in series. The later issues, with obverse legend, **IMP GORDIANVS PIVS FEL AVG**, probably fall into issues comparable to the Roman, for Antioch at that period was acting as an auxiliary of the Roman mint. We are not certain, however, of the number of its officinae.

We might suggest a first issue with reverse types **FIDES MILITVM, MARTI PACIFERO, PAX AVGVSTI, VICTORIA AVG** (and variants), a second with **FORTVNA REDVX, ORIENS AVG, P M T R P V COS II PP** (Hercules), and **SAECVLI FELICITAS**.

The mint of Rome under Philip I will answer to a similar treatment to that applied to Gordian III, subject to this important modification, that a distinct officina is allotted to both Otacilia and Philip II in the marked series of A.D. 248-249; it is reasonable to assume a similar arrangement for most if not all of the reign.²⁶ As aids to our classification we have further: (a) the change from obverse legend, **IMP M IVL PHILIPPVS AVG** to **IMP PHILIPPVS AVG** in the course of A.D. 247 (**TR P IIII**); (b) the marked series of A.D. 248-249, which fix the latest portraits; (c) the dated coins, running from A.D. 244 to 249, showing development of portrait through the reign; and (d) the close likeness of the first portraits of Philip I to the latest of Gordian III.

The following lists will sum up the results attained by study on these lines:—

Issue 1. Six officinae strike for Philip I.

FIDES MILIT(VM)
(Emperor holding
standards)

LAET FVNDATA
(wreath, rudder; wreath,
rudder, globe)

PAX AETERN(A)
(running r.)

SALVS AVG
(standing l.)

VICTORIA AVG
(advancing r.)

VIRTVS AVG
(standing l.)

²⁶ Philip I has nearly five times as many coins as either his wife or his son: the proportion is not far out then.

*Issue 2.***FIDES MILIT**
(standard and sceptre)**PAX AETERN**
(standing l.)**VICTORIA AVG**
(advancing l.)**LAETIT FVNDATA**
(wreath, rudder, globe)**SALVS AVG**
(standing r.)**VIRTVS AVG**
(seated l.)*Issue 3. Four officinae strike for Philip.***LAETIT FVNDAT**
(patera, rudder, prow)**VICTORIA AVGG**
(standing l.)**SALVS AVGG**
(standing r.)

and, as fourth type, a continuation of **FIDES MILIT** or **PAX AETERN** (date A.D. 244-245).

All these issues are characterized by early portraits, often related to that of Gordian III. The **AVG** instead of **AVGG** in reverse legends is naturally suggestive of early date, and, perhaps, justifies us in postulating initial issues for Philip I in all officinae.

A second group, still with obverse legend, **IMP M IVL PHILIPPVS AVG**, has a more individual portrait of Philip and **AVGG**, not **AVG** in all reverse legends. It extends up to the change of obverse legend in A.D. 247. The keynote seems to be struck by the reverse, **ADVENTVS AVGG**; the Emperors return to Rome and define their policy and their hopes for the future. We suggest, tentatively, the following issues:

*Issue 4. ADVENTVS AVGG, FELICITAS TEMP, LIBERALITAS AVGG II, SECVRIT ORBIS**Issue 5.***AEQVITAS AVGG****ROMAE AETERNAE****ANNOA AVGG**
(modius)**P M TR P II COS P P**

Issue 6.

AEQVITAS AVGG	ANNONA AVGG (Modius)
ROMAE AETERNAE	P M TR P III COS P P (Felicitas)

Issue 7.

AEQVITAS AVGG	ANNONA AVGG (prow)
ROMAE AETERNAE (altar)	P M TR P IIII COS II P P (Felicitas)

It is possible that we are making one issue too many, through exaggerating the range of the Aequitas, Annona, and Roma issues (A.D. 245-247).

The third group is characterized by obverse legend, IMP PHILIPPVS AVG, and extends to the end of the reign. It will run something like this:

Issue 8.

AEQVITAS AVGG	ANNONA AVGG (prow)
ROMAE AETERNAE (altar)	P M TR P IIII COS II P P (Felicitas)

The rare and interesting VICTORIA CARPICA probably belongs, as a supernumerary, to this period.

Issue 9.

AETERNITAS AVGG	ROMAE AETERNAE (altar)
SAECULARES AVGG COS III (column)	SAECVLVM NOVVM (temple)

extending from A.D. 247 into 248 (note Cos. III).

Issue 10.

SAECVLARES AVGG, throughout.

Lion I	She-wolf and twins II	Elk r. V	Antelope l. VI
-----------	--------------------------	-------------	-------------------

Issue 11.

P M T R P V C O S I I I P P	T R A N Q V I L L I T A S A V G G
(Mars)	B

A	
V I R T V S A V G G	N O B I L I T A S A V G G
E	5

[Pl. IV. 1, 2, 5, 6.]

The date, T R P V, shows that the issue belongs, in part at least, to A.D. 248. The rare reverse P M T R P V C O S I I I P P (*Felicitas*) seems to have no place in either issue, I or II: it is probably to be appended to issue 9.

Issue 12.

F E L I C I T A S I M P P	F I D E S E X E R C I T V S
	(Fides standing l.)

F I D E S E X E R C I T V S	F O R T V N A R E D V X
(four standards)	[Pl. IV. 7, 8, 11, 12.]

Issue 11 only took us to the beginning of A.D. 249, and Philip did not die till the September of that year. The obverse portraits are late, and the reverses are all appropriate in view of the rebellion of Trajan Decius and the march of the elder Philip to meet him.

For Otacilia Severa we must expect some ten separate issues in one officina. She has three obverse legends:

- (1) M A R C I A O T A C I L S E V E R A A V G
- (2) M O T A C I L S E V E R A A V G
- (3) O T A C I L S E V E R A A V G

certainly successive, and in that order. With (1) we have reverses C O N C O R D I A A V G G, P I E T A S A V G (several variants), P V D I C I T I A A V G, with (2) C O N C O R D I A A V G G (also with altar), P V D I C I T I A A V G,

with (3) **CONCORDIA AVGG** (altar), **SAECVLARES AVGG**

Hippopotamus (III), **PIETAS AVGG**, Δ [Pl. IV. 4],
PIETAS AVGVSTAE [Pl. IV. 10].

Working backwards from (3), we can assign its four types to issues 9, 10, 11, 12 of Philip. **CONCORDIA AVGG** (altar) issue is probably extensive enough to cover issues 7 and 8 as well. Obverse (2) will correspond roughly to issues 4 to 6 of Philip I, the sequence of obverses being probably—issue 4 **PVDICITIA AVG**, issue 5 **CONCORDIA AVGG**, issue 6 **CONCORDIA AVGG**, altar. The three reverses of obverse 1 are then left to correspond to issues 1–3 of Philip. We are clearly too crowded at this point, and the fact that two types of obverse 1 carry over into obverse 2 suggests that we should place those types in simultaneous issue.

The coinage of Philip II will also have to be assigned, type by type, to one officina. The issues of Philip II as Caesar will extend from c. A.D. 245 to 247 and will correspond to issues 3–7 of Philip I. The sequence of reverses will be **PIETAS AVGVSTOR** (priestly emblems) and **SPES PVBLICA**, followed by the great mass of **PRINCIPI IVVENT** (-VTIS) issues. In the “Augustus” coinage of Philip II (A.D. 247–249), to issue 8 of Philip I will correspond **LIBERALITAS AVGG** III of Philip II, to issue 9 **AETERNIT IMPERI**, to 10 **SAECVLARES AVGG** (Goat 1. III), to 11 **VIRTVS AVGG**. Γ [Pl. IV. 3], and to 12 **PAX AETERNA** [Pl. IV. 9].

The Antioch issues of Philip I show three reverse types, **PAX FVNDATA CVM PERSIS**, **SPES FELICITATIS ORBIS**, and **VIRTVS EXERCITVS**, with two

forms of obverse legend, perhaps marking two issues. To these we should probably add the **IVNO CONSERVAT (-RIX)** type of Otacilia [Pl. IV. 14] and the **IOVI CONSERVAT** of Philip II [Pl. IV. 13]. The date is early (A D. 244–245).

The organization of the mint of Rome under Trajan Decius was carefully investigated when the Plevna hoard was described,²⁷ and the main results then obtained are still of some value to-day. Now, however, we might be more cautious in assigning numbers to the different officinae and thus linking them individually to the numbered officinae of Philip I. The first issue, with obverse legend, **IMP TRAIANVS DECIVS AVG**, has the following reverse types: **ADVENTVS AVG**, **DACIA**, **GENIVS EXERCITVS ILLVRICIANI**, **PANNONIAE** (single figure), **PAX AVGVSTI**, **VICTORIA AVG**, **VIRTVS AVG**. Here we have seven types: but **PANNONIAE** and **VIRTVS AVG** certainly belong to one officina, and the same might be true of **ADVENTVS AVG** and **PAX AVGVSTI**. We may conjecture a first issue in two stages in five officinae:

Issue 1.

- (a) **DACIA**, **GENIVS EXERCITVS ILLVRICIANI**, **PAX AVGVSTI**, **VICTORIA AVG**, **VIRTVS AVG**
- (b) **DACIA**, **GENIVS EXERCITVS ILLVRICIANI**, **ADVENTVS AVG**, **VICTORIA AVG**, **PANNONIAE**

Date A.D. 249–early 250 (?). The sixth officina will belong to Herennia Etruscilla.

The remaining Roman issues of the reign all show obverse legend, **IMP C M Q TRAIANVS DECIVS**

²⁷ *Num. Chron.*, 1924, pp. 210 ff.

AVG. The reverse types are of essentially the same stock as those of Issue 1 b, with some few additions and modifications. The following tables will show approximately how they were distributed:

Issue 2.

ADVENTVS AVG	DACIA	GENIVS EXERCITVS
		ILLVRICIANI
PANNONIAE	VICTORIA AVG	
(single figure)		

Issue 3.

ABVNDANTIA AVG	DACIA	GENIVS EXERC
		ILLVRICIANI
PANNONIAE	VBERITAS AVG	
(two figures)		

Issue 4.

ABVNDANTIA AVG	DACIA FELIX	}
	GEN ILLVRICIANI	
PANNONIAE	VBERITAS AVG	
(two figures, vis-à-vis)		

ADVENTVS AVG and ABVNDANTIA AVG certainly belong to one officina: VBERITAS AVG is akin in style to VICTORIA AVG and may succeed it. The DACIA and GENIVS types are certainly related over part of their course and should perhaps be placed together in Issue 3 as well as Issue 4. The officina left vacant will belong to the two young princes, Herennius Etruscus and Hostilian.

Herennia Etruscilla has one unvarying obverse legend and four main reverse types probably succeeding one another in the order, IVNO REGINA, FECVNDITAS AVG (AVGG), PVDICITIA (standing), PVDICITIA (seated). A change of coiffure, to be noted only in the PVDICITIA types and more strongly in the seated than in the standing, seems to confirm the sequence.

The coinage of the two Caesars is too ample and varied, on all general principles, for the one officina that we find free for them. It is obvious that here the ordinary rules were relaxed and that either a number of types of the Caesars were struck in one officina or that the smaller types were distributed over the other officinae of the mint. Herennius Etruscus became Caesar in the course of A.D. 250. He has six main types as Caesar, probably in this order—**SPES PVBLICA**, **PIETAS AVGVSTORVM** (priestly emblems), **PRINCIPI IVVENTVTIS** (prince l.), **PRINCIPI IVVENT(VTIS)** (Apollo), **CONCORDIA AVGG**, **PIETAS AVGG** (Mercury). The "Augustus" issue is of the very end of the reign and comprises the reverses **PRINC IVVENT** (Apollo), **PIETAS AVGG**, and **VICTORIA GERMANICA**.

Hostilian was created Caesar a little later than his brother. His own distinctive types are **MARS PROP** (and variants) and **PRINCIPI IVVENTVTIS** (standard and spear), but he also shows several of his brother's. His coinage as Augustus only begins after the death of Decius.

There remain for consideration two groups of coins, which are to be assigned to another mint, probably Milan—the coins of Trajan Decius with obverse **IMP CAE TRA DEC (DECIVS) AVG** and the series of the "Divi". It is possible that there may be coins of Herennia and her sons belonging to this mint, but, in any case, they have not yet been distinguished.²⁸ Trajan Decius has three main types, **DACIA FELIX**,

²⁸ Is it possible that the second coiffure of Herennia marks this mint? The **VICTORIA GERMANICA** of Herennius might belong to this mint; cf. the similar type of his father.

GEN ILLVRICI, and **PANNONIAE** (two figures, vis-à-vis) which may belong to three officinae. The coins of the "Divi" either represent a special issue or were distributed over the officinae of Decius. Coins of the Empress and princes, if such were struck, might be assigned to the **PANNONIAE** officina, which seems to be less full than the others. **VICTORIA GERMANICA** of Decius is a rare and redundant type. Of the two legends of Decius the longer, with **DECIVS** for **DEC**, seems to be the later, but they certainly overlap. Faint traces of an earlier issue are perhaps to be seen in such types as **ADVENTVS AVG**, **ABVNDANTIA AVG**, **DACIA** and **GENIVS EXERC ILLVRICIANI**, which occur exceptionally with obverses of this mint.

The years from A.D. 251 to 257 are less fully represented in this hoard, and we shall therefore pass rather more lightly over them, leaving a more complete analysis of the work of the mints to later investigation. On the death of Trajan Decius seems to follow a tentative issue of Hostilian, with such types as **PRINCIPI IVVENTVTIS** (Prince l.), **PRINCIPI IVVENTVTIS** (Apollo), **MARTI PROPVGNATORI**, **PIETAS AVGG** (Mercury). Next come types that clearly bear on the concordat with Trebonianus Gallus—**CONCORDIA AVGG**, **IVNONI MARTIALI**, **SECVRITAS AVGG**—and with these we must associate the first issues of Gallus (**PROVIDENTIA AVG** (**AVGG**), **SALVS AVGG**, **VICTORIA AVGG**, **MARTI PACIFERO**), and the issues of Volusian as Caesar (**IVNONI MARTIALI**, **PAX AVGG**, **PRINCIPI IVVENTVTIS**, **ROMAE AETERNAE**). These issues were one and all of slight extent, for Hostilian died in late summer A.D. 251, and a new period of the mint set in

with Volusian as Augustus beside his father. Arrangement now must depend on whether the officinae were divided over the two rulers, three and three, or whether Gallus took four to his son's two.²⁹ In any case there are something like four distinct issues. What is more important is that there are definite traces of a final issue of Volusian without his father. The two types, **P M TR P IIII COS II P P**, Emperor sacrificing, and Emperor bearing branch, are quoted by Cohen for both Emperors. In our hoard Volusian had 28 of the former, 26 of the latter, Gallus none of either. When we look at our *fasti* and find that Volusian, without Gallus, was consul (**COS II**) in A.D. 253, we see a possible explanation at once. Was Gallus actually dead before the end of A.D. 252, and did Volusian survive him, if only by a month or two?³⁰

At Milan we have four main types of Gallus, two of Volusian, which fall quite naturally into two issues:

Issue 1.

Gallus. **IVNO MARTIALIS, PAX AETERNA.**

Volusian. **FELICITAS PVBLICA.**

Issue 2.

Gallus. **LIBERTAS PVBLICA, PIETAS AVG.**

Volusian. **VIRTVS AVGG.**

There seem to be no Milan coins of Hostilian as Augustus or of Volusian as Caesar. We might perhaps assign the issue of the series of "Divi" predominantly to the period just before and after the death of Decius.

The short reign of Aemilian shows two distinct

²⁹ At Milan, we shall see, Gallus seems to have two to one.

³⁰ Dessau, *I.L.S.*, 525 shows Gallus and Volusian as both **PONTIF MAX TRIB POTEST IIII COS II P P**, but the date may be A.D. 252, not 253, the titles of the senior Augustus being applied to both colleagues.

obverse legends and no less than 13 reverse types—all to be assigned, if we may judge by style, to the one mint of Rome. The arrangement works out very neatly thus:

Issue 1.

Obv. IMP AEMILIANVS PIVS FEL AVG

APOL CONSERVAT, DIANAE VICTR,
ERCVL VICTORI, MARTI PROPVGT,
ROMAE AETERN, VOTIS DECENNALIBVS.

Issue 2. Obv. as in 1.

(a) IOVI CONSERVAT, MARTI PACIF, P M TR
PIPP (Emperor I.), PACIAVGG, SPES PVBLICA,
VICTORIA AVG, VIRTVS AVG.

(b) *Obv.* IMP CAES AEMILIANVS P F AVG

Rev. as in 2 (a).

Issue 2, it will be seen, has one redundant type. We have probably to place two of the types in one officina, while the very rare coins of Cornelia Supera must be assigned to another of her husband's. This is an elaborate scheme of coinage for the bare three months of rule that are ordinarily allotted to Aemilian. But, if our conjecture about the death of Gallus in A.D. 252 was correct, Volusian too may have succumbed early in 253 and Aemilian may have reigned as much as six months in Rome (end of January–July A.D. 253). Our literary tradition is too fragmentary to justify us in refusing to accept new light from coins, when it is offered.

The types of Valerian I and his family, best represented in the hoard, are obviously those that were struck in the greatest numbers at Rome, Milan, and Lugdunum in the years A.D. 253–257. We renounce any closer analysis here, but may say at once that Dorchester would seem, on the whole, to confirm the datings now in general use.

Here we must take leave for the time of the great Dorchester hoard, with one or two problems, we may hope, advanced towards solution, but with other new problems raised and tantalizing us with hints of secrets as yet unrevealed. May it be an encouragement and a challenge to students in an age that is beginning to think over again for itself the fascinating possibilities included under the magic name of "Treasure-Trove"!

In conclusion, it is my pleasant task to thank all who have played a part in the examination of this great hoard: to Colonel Drew of the County Museum, Dorset, to whose prompt vigilance the preservation of the hoard intact is mainly due; to Dr. Plenderleith and Captain Cameron of the British Museum Laboratory for invaluable aid in cleaning the coins; and to Miss Anne Robertson and Mr. J. W. E. Pearce for long and unselfish labours in the identification of the coins in the British Museum.

HAROLD MATTINGLY.

III.

THE AYYŪBID DYNASTY OF THE YAMAN AND THEIR COINAGE.

[SEE PLATE V.]

SOUTH ARABIA, having for many centuries provided the antiquarian and archaeologist with an extensive field for investigation, once more demonstrates the inexhaustible as well as the varied character of its store of curiosities. Since Diodorus Siculus with his Cameleopards and Struthocameli (more ostrich than camel, no doubt), Strabo and his picturesque but still authentic account of polyandry, and Pliny with his tales of gold and frankincense, there seems to have been no lack of opportunity to say something new about this land. This time it is the Yaman—the towns of Zabid, Ṣan'ā', Ta'izz, and 'Adan—and a curiosity of Muhammadan numismatics that reminds us of South Arabia's archaeological fertility. An obscure and in some ways almost inexplicable side-show accompanying the dramatic events which were taking place in Egypt and Syria towards the end of the twelfth century (sixth century of the Hijra) was the conquest of the Yaman by the Ayyūbids, and it is with some faint traces of the petty dynasty founded in South Arabia by the famed Saladin's brother, Tūrānshāh, that the following monograph proposes to deal. The subject in itself is of no great importance; by way of compensation the inquiry may perhaps be pleaded for on two grounds: the coins in the hoard to be discussed have apparently

never been published, and, what is perhaps of greater importance, unlike most contributions in the South Arabian field, the publication of the material should not, we trust, give rise to any great controversy.

About three years ago the American Numismatic Society acquired indirectly from the Yaman a hoard of seventy-seven silver coins which proved on examination to be *dirhams* minted by that branch of the Ayyūbid family which ruled the Yaman for nearly sixty years. The hoard was acquired through the initiative of the late Mr. Howland Wood, curator of the American Numismatic Society. Mr. Wood had done a great share of the work of decipherment and classification before he generously turned the coins over to the author for publication. It was his interest that prompted the writing of the present paper; and his should be the credit for the "discovery" of this branch of Islamic numismatics. The coins were coated with a light copper oxide which was easily removed by means of a brief immersion in an electrolytic bath. There can be no doubt but that the group of coins represents a hoard; whether the hoard consisted of more than the present number of coins it is impossible to determine, but in any case it is a distinct satisfaction to find that of a total of seventy-seven specimens there are seven mints and twenty different years (from A.H. 605 to 628) represented, and with only nine duplicates there are actually sixty-eight varieties, a really exceptional range in a small hoard of coins, all but one type of which are, to judge by the common numismatic publications, inedited.¹

¹ To our knowledge the only coins of the Ayyūbids of the Yaman so far published are: Ta'izz, 605 (B.M.Or., Add. i, p. 338, no. 468, *m*),

The descriptions of the coins follow. Nos. 1-8 (605-611 A.H.), issued by al-Malik al-Nāṣir Ayyūb b. Ṭughtekin (the fourth Ayyūbid ruler of the Yaman) are handsome *dirhams* well engraved in Kufic character. The rest, nos. 9-68 (612-628 A.H.), while of the same general fabric, are of a different style, with the inscriptions in flowing Naskhī and the mint formula in the area (no marginal inscriptions). When the coin is not complete, the weight is not given.

I. *Al-Malik al-Nāṣir Ayyūb b. Ṭughtekin.*

(Overlord: Al-Malik al-ʿĀdil of Egypt.)

Mint: TAʿIZZ.

1. *Obv.* Area, within a circle of zigzag lines:

لا اله الا الله
محمد رسول
الله صلى الله
عليه

Margin, enclosed by a linear circle and a border of dots:

بسم الله الرحمن الرحيم ضرب هذا الدرهم بتعز سنة خمس ستمة

Rev. Area, as on obverse:

صر
الامام النا
لدين الله احمد
امير المؤ
منين

Taʿizz, 608 (Lavoix, iii, no. 699), and ʿAdan, 608½ (B.M.Or., Add. i, p. 338, no. 468, p). Cf. nos. 1-8 below. The coins of al-Maṣʿūd Yūsuf appear to be altogether unpublished.

Margin, as on obverse :

الملك العادل ابو بكره الملك الناصر ابو المظفر ايوب بن طغتكين

Floral ornament above امير

605 A.H. AR .85. Wt. 31.6 (2.05 g.).

2. *Obv.* As no. 1, but date : سنة تسع [?] وستمة

Rev. As no. 1, but طغتكين is abbreviated thus : طغتك, and there is no floral ornament above امير

609 (?) A.H. AR .85. Wt. 30.9 (2.00 g.).

3. As no. 1, but date : سنة عشرة ستما

610 A.H. AR .85. Wt. 32.4 (2.10 g.).

4. As no. 1, but date : سنة احد عشرة سا

611 A.H. AR .85. Wt. 32.4 (2.10 g.).

Mint: ZABĪD.

5. *Obv.* As no. 1, but : بزبيد سنة ثمان [?] وستمة

Rev. As no. 2, but the floral ornament is present.

608 (?) A.H. AR .85. Wt. 33.9 (2.20 g.).

6. *Obv.* As no. 1, but : بزبيد [?] سنة تسع [?] وستمة

Rev. As no. 1.

609 (?) A.H. AR .85. Wt. 32.4 (2.10 g.).

7. *Obv.* and *Rev.* As no. 5, but date : سنة عشرة ستما

610 A.H. AR .85. Wt. 33.1 (2.15 g.). [Pl. V. 1.]

Mint lacking.

8. *Obv.* As no. 1, but date : ثمان وستمة

Rev. As no. 5.

608 A.H.

II. *Al-Malik al-Mas'ūd Ṣalāh al-Dīn Yūsuf.*

(Overlords: al-Malik al-ʿĀdil and al-Malik al-Kāmil
of Egypt.)

Mint: TA'IZZ.

9. *Obv.*²

ل الله
سو
لا اله الا الله محمد ر
الامام الناصر لدين الله احمد
ب
امير المؤمنين ضر بتعز سنة
اثنى عشر ستمائة

Floral sprigs above اله and محمد, second line.

Rev.

الله
بسم
الملك العادل ابو بكر
لى عهده الملك الكامل محمد و
لى عهده الملك المسعود
يوسف

Point above الله, first line; floral sprig above عهده, fourth line.

612 A.H. AR .9. Wt. 31.7 (2.05 g.).

10. *Obv.* As no. 9, scrolls above منين of المؤمنين and عشر.

Rev. As no. 9, but another die; the و of the first لى follows the word بكر; scrolls above لى, fourth line, and عهده, fifth line.

612 A.H. AR .9. Wt. 32.4 (2.10 g.). [Pl. V. 2.]

² Unless otherwise stated the inscriptions of both obverse and reverse of all the coins described hereafter are surrounded by a linear circle and an (outer) border of dots.

11. *Obv.* As no. 10, but of coarser workmanship, and date: عشرين ستمائة. Annulet before الله, first line; ornament above و of المؤمنين.

Rev. As no. 9, but the و of the first ولي follows the word بكر, and there is no و for the second ولي and no s following the second عهد. Various points.

Two specimens. 620 A.H. *R* .9.

Wt. 32.4, 31.6 (2.10, 2.05 g.).

12. *Obv.* As no. 11; various points and scrolls.

Rev. As no. 11; the end of the fourth line is effaced, and the s is present after the second عهد. Various points and scrolls.

620 A.H. *R* .9. Wt. 33.9 (2.20 g.).

13. *Obv.*

ل
الله الامام ابو سو
لا اله الا الله محمد ر
جعفر المنصور المستنصر بالله
ب
امير المؤمنين ضر بتعز سة
خمس عشرين ستمائة

Numerous points and scrolls.

Rev.

الله
بسم
الملك الكامل ابو
المعالى محمد ولي عهد
الملك المسعود
يوسف

Various points and scrolls.

625 A.H. *R* .1. Wt. 31.7 (2.05 g.).

Mint: RAYDAḤ.

14. *Obv.* As no. 9, but the last two lines read:

ب
امير المؤمنين ضر بريدح
ثنتين [?] عشر ستمائة

Numerous ornaments.

Rev. As no. 10. Numerous ornaments.

612 (?) A.H. AR .85. Wt. 33.1 (2.15 g.). [Pl. V. 3.]

Mint: ZABĪD.

15. *Obv.*

وستمائة
لا اله الا الله محمد
رسول الله الامام النا
ب
ضر احمد ضر بزبید سنة
اثنى عشرة

Scrolls and points.

Rev. As no. 9, but و is omitted from ولي in both cases, and ٔ is omitted after عهد in both cases. Point above الله.

Two specimens. 612 A.H. AR .85, .9.
Wt. 31, 33.1 (2.00 g., 2.15 g.).

16. *Obv.* As no. 9, but the last two lines read:

ب
امير المؤمنين ضر بزبید سنة
اثنى عشر ستمائة

Two triangular points before اثنى.

Rev. As no. 10 except in style and ornaments. Various points and dashes.

612 A.H. AR .85. Wt. 33.1 (2.15 g.).

17. *Obv.* and *Rev.* As no. 16, but date: ثلث عشرة ستمائة.

613 A.H. AR .85. Wt. 30.1 (1.95 g.).

18. *Obv.* As no. 16, but date: اربعة عشر ستمائة. Floral sprigs above الله and محمد. Point above الله, first line. Die very similar to no. 9.

Rev. Die identical with that of no. 9.

614 A.H. R .85. Wt. 32.4 (2.10 g.).

19. *Obv.* As no. 18. Point above سنة.

Rev. As no. 9, but the و of the first ولي follows the word بكر, and the و of the second ولي follows the word محمد. Various points.

614 A.H. R .85. Wt. 33.9 (2.20 g.).

20. *Obv.*

الله
سور
لا اله الا الله محمد
الامام الناصر لدين الله ا
حمد
ب
امير المؤمنين ضر بن زيد سنة
سبع عشرة ستمائة

Rev. As no. 9, but there is no و for the second ولي.

617 A.H. R .85. Wt. 32.4 (2.10 g.). [Pl. V. 4.]

21. *Obv.* As no. 20, but date: ثمان عشرة ستمائة. Annulet and point before الله, first line; annulet below ستمائة.

Rev. As no. 9, but the و of the first ولي follows the word بكر, and there is no و for the second ولي. Annulets before and over الله.

618 A.H. R .85. Wt. 31 (2.00 g.).

22. *Obv.* As no. 16, but date: عشرين ستمائة. Annulet before الله, first line.

Rev. As no. 9, but و is omitted from ولي in both cases, and ٔ is omitted after عهد in both cases. No ornaments.

620 A.H. A .8. Wt. 32.4 (2.10 g.). [Pl. V. 5.]

23. *Obv.* As no. 22, but the first line arranged thus : الله سول .
Two (or more) points above س of رسول ; three points above عشرين . The border of dots, if any, is off the flan.

Rev. As no. 9, but the و of the first ولي follows the word بكر , and there is no 3 following the second عهد . Annulet above الله .

620 A.H. AR .8.

24. *Obv.* As no. 20, but date : احد عشرين ستمائة . Point before الله , first line.

Rev. As no. 9, but the و of the first ولي follows the word بكر , and there is no و for the second ولي . Annulet above الله ; ornament and point above س of المسعود .

621 A.H. AR .85. Wt. 34.7 (2.25 g.).

25. *Obv.* As no. 9, but the word احمد has been conventionalized into nothing more than an initial > (?), and date : احد عشرين ستمائة . Point above عشرين .

Rev. As no. 22. Dash above ك of الملك , third line.

621 A.H. AR .85. Wt. 32.4 (2.10 g.).

26. *Obv.* As no. 25, but date written : احدى عشرين ستمائة . The > of the word احمد is clear, but the rest of the word is lacking or off the flan. Scroll before الله , first line ; ornament above ى of احدى .

Rev. Identical with no. 25.

621 A.H. AR .85. Wt. 33.2 (2.15 g.).

27. *Obv.* As no. 25.

Rev. As no. 9, but the و of ولي is omitted in both cases, and there is no 3 following the second عهد .

621 A.H. AR .86. Wt. 34.7 (2.25 g.).

28. *Obv.* As no. 9, but date : اثني عشرين ستمائة , and the first line is written thus : الله ل سو . Ornaments at either end of first line and above سنة .

Rev. As no. 24.

622 A.H. AR .88.

29. *Obv.* As no. 28.

Rev.

الله
بسم
الملك الكامل ابو ا
لمعالى محمد ولى عهده
الملك المسعود
يوسف

Various points and scrolls.

622 A.H. \mathcal{R} 85. Wt. 32.4 (2.10 g.).

30. *Obv.* As no. 29.

Rev. As no. 29. No ornaments.

622 A.H. \mathcal{R} 85. Wt. 32.4 (2.10 g.).

31. *Obv.* As no. 15.

Rev. As no. 29. Ornaments above و of ابو and س of
المسعود.

612 (= 622) A.H. \mathcal{R} 9. Wt. 33.9 (2.20 g.).

32. *Obv.* As no. 31.

Rev. As no. 29.

612 (= 622) A.H. \mathcal{R} 9. Wt. 30.9 (2.00 g.).

33. *Obv.* As no. 31.

Rev.

الله
بسم
الملك الكامل ابو المع
لى محمد ولى عهد...
الملك المسعود يو
سف

Numerous scrolls and dashes.

612 (= 622) A.H. \mathcal{R} 9. Wt. 31.6 (2.05 g.).

34. *Obv.* As no. 20, but date : ثلث عشرين ستمائة. Annulets
at either end of the first line.

Rev. As no. 29.

623 A.H. \mathcal{R} 85. Wt. 32.4 (2.10 g.).

35. *Obv.*

الله ل سو
 لا اله الا الله محمد ر
 الامام الظاهر ابو نصر محمد
 ب
 امير المؤمنين ضر بزويد سنة
 ثلاث عشرين ستمائة

Various points and scrolls.

Rev. As no. 29.

623 A.H. AR .9. Wt. 31.6 (2.05 g.). [Pl. V. 6.]

36. *Obv.*

الله الامام ل
 لا اله الا الله محمد رسو
 ابو جعفر المنصور المستنصر
 ب
 بالله امير المؤمنين ضر بزويد سنة
 اربع عشرين ستمائة

Rev. As no. 32.

Numerous points and scrolls.

624 A.H. AR .9. Wt. 32.4 (2.10 g.).

37. *Obv.* As no. 13, but the last two lines read :

ب
 امير المؤمنين ضر بزويد سنة
 خمس عشرين ستمائة

Rev. As no. 32.

625 A.H. AR .9. Wt. 33.2 (2.15 g.).

38. *Obv.* As no. 37.*Rev.* As no. 29.

625 A.H. AR .9.

39. *Obv.* As no. 36, but the first two lines are arranged thus :

ل الله الامام سو
لا اله الا الله محمد ر

and date خمس عشرين ستمائة

Rev. As no. 38.

625 A.H. R .9. Wt. 31.6 (2.05 g.).

40. *Obv.* As no. 39.

Rev. As no. 29.

3 specimens. 625 A.H. R .9, .85, .85.
Wt. 33.2, 31.6 (2.15, 2.05 g.).

41. *Obv.*

لله الامام ابو جعفر
سو
لا اله الا الله محمد ر
بالله ا
المنصور المستنصر مير
ب
المؤمنين ضر بزبيد سنة
ست عشرين ستمائة

Numerous points and scrolls.

Rev. As no. 33.

2 specimens. 626 A.H. (2). R .9, .85.
Wt. 32.5, 33.2 (2.10, 2.15 g.).

42. *Obv.*

ل الله الامام ابو
سو
لا اله الا الله محمد ر
جعفر المنصور المستنصر بالله
ب
امير المؤمنين ضر بزبيد سنة
سبع عشرين ستمائة

Numerous ornaments.

Rev. As no. 29, but

..... عهده ا
..... لملك

627 A.H. R .9. Wt. 31.6 (2.05 g.).

Mint : ŞAN'Ā'.

43. *Obv.* As no. 9, but the last two lines read :

ب
امير المؤمنين ضر بصنعا سنة
سبع عشرة ستمائة

No ornaments.

Rev. As no. 10. Two points below the ی of يوسف and one point above the ف of the same word.

617 A.H. AR .8. Wt. 30.9 (2.00 g.).

44. *Obv.* As no. 20, but the last two lines read :

ب
امير المؤمنين ضر بصنعا سنة
احدى عشرين ستمائة

Point before الله, first line ; point above ص of الناصر.

Rev. As no. 29. Point above ك of الكامل ; point above ك of الملك, fifth line.

621 A.H. AR .85. Wt. 30.1 (1.95 g.).

45. *Obv.* As no. 43, but date : احدى عشرين ستمائة. Various points ; scroll before الله, first line.

Rev.

الله
بسم
الملك الكامل ابوا
معالي محمد ولى عهد
الملك المسعود يو
سف

Various points and scrolls.

621 A.H. AR .9. Wt. 30.9 (2.00 g.).

46. *Obv.* As no. 35, but the last two lines read :

ب
امير المؤمنين ضر بصنعا سنة
ثلاث عشرين ستمائة

Rev. As no. 45.

623 A.H. AR .9. Wt. 31.6 (2.05 g.).

47. *Obv.* As no. 46.

Rev. As no. 45.

2 specimens. 623 A.H. (2). \mathcal{R} .9, .9.
Wt. 31.6, 29.3 (2.05, 1.90 g.).

48. *Obv.*

ل
الله الامام
سو
لا اله الا الله محمد ر
ابو جعفر المنصور المستنصر
بالله

ب
امير المؤمنين ضر يصنع سنة
خمس عشرين ستمائة

Various dashes and scrolls.

Rev. As no. 29. Annulets, scrolls, and other ornaments.
625 A.H. \mathcal{R} .95. Wt. 31.6 (2.05 g.). [Pl. V. 7.]

49. *Obv.* As no. 13, but the last two lines read:

ب سنة
امير المؤمنين ضر يصنع
ست عشرين ستمائة

Rev. As no. 29.

626 A.H. \mathcal{R} .9. Wt. 32.4 (2.10 g.).

Mint: 'ADAN.

50. *Obv.* As no. 9, but the last two lines read:

ب
امير المؤمنين ضر بعدن سنة
ست عشر ستمائة

Floral sprig before الله, and three points over the
same word, first line.

Rev.

الله
بسم
الملك العادل ابو بكر و
لى عهد الملك الكامل محمد و
لى عهد الملك المسعود
يوسف

Various points.

616 A.H. \mathcal{R} .75. Wt. 33.9 (2.20 g.). [Pl. V. 8.]

51. *Obv.* As no. 50, but date : احدى ستمائة
عشرين

No ornaments.

Rev. As no. 50, but the و of *ولى* is omitted in both cases, and the *z* is omitted after *عهد* in both cases. No ornaments.

621 A.H. AR .9. Wt. 33.9 (2.20 g.).

52. *Obv.* As no. 51 ; date written on one line. No ornaments.

Rev. As no. 50, but the و of *ولى* is omitted in both cases, and the *z* is lacking after *عهد* in the fourth line. No ornaments.

621 A.H. AR .85. Wt. 33.9 (2.20 g.).

53. *Obv.* As no. 20, but the last two lines read :

ب
امير المؤمنين ضر بعدن سنة
ثنتين [?] عشرين ستمائة

No ornaments.

Rev. As no. 51 (the third and fourth lines are obliterated at the left ; hence it is not certain that و is omitted in either case). No ornaments.

622 (?) A.H. AR .85. Wt. 30.9 (2.00 g.).

54. *Obv.* ستمائة

ل الله الامام ابو سو
لا اله الا الله محمد ر
بالله
جعفر المنصور المستنصر
ب سنة
امير المؤمنين ضر بعدن
خمس عشرين

Numerous points, scrolls, and annulets.

Rev. As no. 29, but there is no *z* following *عهد*.
Numerous points, scrolls, and annulets.

2 specimens. 625 A.H. (2). AR .85, .85.
Wt. 33.2, 30.1 (2.15, 1.95 g.).

55. *Obv.*

ل الله الامام سو
 لا اله الا الله محمد بالله
 ابو جعفر المنصور المستنصر
 امير المؤمنين ب
 خمس عشرين سنة
 ست مائة

Points and dashes.

Rev. As no. 54; looped ornament over س of بسم.
 Small fragment lacking.

625 A.H. R .9. Wt. 32.4 (2.10 g.).

56. *Obv.* As no. 55, but the first two lines arranged thus:

الله الامام ابو سو...
 لا اله الا الله محمد...

and date ست عشرين سنة

Rev. As no. 54; scroll above س of بسم; point above الله
 and above محمد. Exceptionally thin.

2 specimens. 626 A.H. R .95.
 Wt. 33.1, 31.6 (2.15, 2.09 g.).

57. *Obv.* As no. 13, but the last two lines read:

امير المؤمنين ب
 ضر بعدن سنة
 ست عشرين سنة
 ست مائة

Rev. As no. 54.

626 A.H. R .95. Wt. 33.1 (2.15 g.).

58. *Obv.* As no. 41, but the last three lines read:

امير المؤمنين ب
 ضر بعدن سنة
 ست مائة
 وعشرين

Rev. As no. 29.

2 specimens. 626 A.H. R .95, .9.
 Wt. 33.2, 33.9 (2.15, 2.20 g.).

59. *Obv.* and *Rev.* As no. 58.

62[6?] A.H. AR .9. Wt. 31.6 (2.05 g.).

60. *Obv.* As no. 57.

Rev. As no. 29.

62[6?] A.H. AR .9. Wt. 32.4 (2.10 g.).

61. *Obv.* As no. 57, but date: سبع عشرين ستمائة.

Rev. As no. 54.

627 A.H. AR .95. Wt. 31.7 (2.05 g.).

III. *Al-Malik al-Kāmil of Egypt (alone).*

(No local ruler.)

Mint: 'ADAN.

62. *Obv.* As no. 61.

Rev.

الله
بسم
الملك الكامل
ابو المعالي محمد
بن ابي بكر بن
ايوب

Numerous points and scrolls.

627 A.H. AR .95. Wt. 32.4 (2.10 g.). [Pl. V. 9.]

63. *Obv.* As no. 61.

Rev. As no. 62.

627 A.H. AR .95. Wt. 33.1 (2.15 g.).

64. *Obv.* As no. 61, but the first three lines arranged thus:

ابو
ل الله الامام
سو
لا اله الا الله محمد ر

Rev. As no. 62, but the fifth line: ابن ابي بكر بن.

627 A.H. AR .95. Wt. 31.6 (2.05 g.).

IV. *Al-Malik al-ʿĀdil Saif al-Dīn Abū Bakr (b?)*
Yūsuf.

(Overlord: al-Malik al-Kāmil of Egypt.)

Mint: 'ADAN.

65. *Obv.* As no. 61, but date: ثمان عشرين ستمائة.*Rev.*

الله
بسم
الملك الكامل ابو المعالي
محمد الملك العادل سيف
الدين . . . بكر ابن [?]
يوسف

Numerous points and scrolls.

628 A.H. AR 9. Wt. 32.4 (2.10 g.). [Pl. V. 10.]

Mint unidentified.

66. *Obv.*

ابو ل
الله الامام سو
لا اله الا الله محمد ر
بالله ا
جعفر المنصور المستنصر
ب
مير المؤمنين ضر ركبا
سنة [?]
ثمان عشرين ستمائة

Numerous points and scrolls.

Rev.

الله
بسم
الملك الكامل ابو المعالي
لى محمد الملك العادل
سيف الدين ابى [ابو [?] or] بكر ا . . .
يوسف

Numerous points, annulets, and scrolls.

628 A.H. AR 85. Wt. 30.1 (1.95 g.). [Pl. V. 11.]

67. *Obv.* As no. 66.*Rev.* As no. 66, but last two lines :

سيف الدين ابى بكر ا

بن [?] يوسف

628 A.H. AR .95. Wt. 31.6 (2.05 g.).

68. *Obv.*

ل الله الامام ابو سو

لا اله الا الله محمد ر

بالله

جعفر المنصور المستنصر

امير المؤمنين ضرر سنة [?]

... عشرين ستمائة

Various annulets and scrolls.

Rev.

الله

بسم

الملك الكامل ابو المعا

لى محمد الملك العال

سيف الدين ابى بكر... [?]

يوسف

Various points and scrolls.

62[8?] A.H. AR .95. Wt. 32.4 (2.10 g.).

[Pl. V. 12.]

Notes on the Coinage.

The craftsmanship of the die-cutters is uneven. Some of the specimens are quite finely executed; others are miserable, the words crowded and the letters badly designed. The words *ولى* and *عهد* gave trouble in particular, and often the die-engraver, whether in ignorance or out of laziness, omitted the *و* and the *ه*. The use of the term *wali 'ahd* is remarkable. The usual sense of *wali 'ahd* is heir apparent, and the term was commonly used on coins struck by a designated heir

who had not yet succeeded to power. Its use on the coinage (probably by order from Cairo) in South Arabia would seem to indicate a desire on the part of the overlords al-ʿĀdil and al-Kāmil in Egypt to remind Yūsuf that his sovereignty in the Yaman was less substantial than he might suppose. The reader will note irregularity in the use of the genders and in the omission of the conjunctions in expressing the dates. The descriptions reproduce these irregularities as they occur.

The types represented in the hoard are as follows:

Type A: Nos. 1-8, Taʿizz and Zabīd, 605-611 A.H. The area of the obverse bears the following inscription: There is no god but Allāh | Muhammad is the Apostle | of Allāh, Allāh bless | him. Obverse margin: the date and mint formula commencing with: In the name of Allāh the Compassionate, the Merciful. The reverse area bears the name of the Caliph: Al-Imām al-Nāṣir (with ^{مر} above) | li-Dīn-Allāh Aḥmad | Commander of the Faithful. Reverse margin: Al-Malik al-ʿĀdil Abū Bakr al-Malik al-Nāṣir Abū'l-Muzaḥḥar Ayyūb b. Ṭuḡṭekīn (the last word sometimes abbreviated for lack of space).

Type B: Nos. 9-12, 14-28, 43, 50-53, Taʿizz, Rayḍāḥ, Zabīd, Ṣanʿā and ʿAdan, 612-622 A.H. Obverse: There is no god but Allāh, Muhammad is the | Apostle of Allāh | al-Imām al-Nāṣir li-Dīn-Allāh Aḥmad | Commander of the Faithful, it was struck in (mint) year | (date). There are several variations in the manner in which the words رسول الله are piled up above the first part of the declaration of faith. No. 15 has al-Nāṣir written on two lines, and the words "six hundred" at the top of the inscription. Reverse: In the name of | Allāh | al-Malik al-ʿĀdil Abū Bakr | his heir apparent al-Malik al-Kāmil Muhammad | his heir apparent al-Malik al-Masʿūd | Yūsuf. There are a number of variations in respect to the position of the letter و, in the two words روي, of the ر in the two words رعد, and the occasional omission of these two letters.

Type C: Nos. 29-34, 44-45, Zabīd and Ṣanʿā, 621-623 A.H. Obverse, same formula as type B. Reverse:

In the name of | Allāh | al-Malik al-Kāmil Abu'l-Ma'ālī Muḥammad, his heir apparent | al-Malik al-Mas'ūd | Yūsuf. The word Yūsuf on no. 45 is on two lines. Nos. 31-33 were struck on the obverse dies of no. 15 with the date 612 (see below).

Type D: Nos. 35, 46-47, Zabīd and Ṣan'ā', 623 A.H. Obverse, like the formula of type B, but the Caliph's name is: al-Imām al-Zāhir Abū Naṣr Muḥammad. Reverse like type C; nos. 46-47 have Yūsuf on two lines as no. 45.

Type E: Nos. 13, 36-42, 48-49, 54-61, Ta'izz, Zabīd, Ṣan'ā', 'Adan, 624-627 A.H. Obverse like the formula of type B, but the Caliph's name is: al-Imām Abū Ja'far al-Manṣūr al-Mustansir bi-Allāh, Commander of the Faithful. There are several variations in the arrangement of the words رسول الله and the first part of the Caliph's name. No. 54 has the words "six hundred" at the top of the inscription. Reverse like type C, with minor variations.

Type F: Nos. 62-64, 'Adan, 627 A.H. The obverse is like type E. The reverse reads: In the name of | Allāh | al-Malik al-Kāmil | Abu'l-Ma'ālī Muḥammad | b. Abī Bakr b. | Ayyūb.

Type G: Nos. 65-68, 'Adan and the unknown mints, 628 A.H. Obverse like type E. Reverse: In the name of | Allāh | al-Malik al-Kāmil Abu'l-Ma'ālī Muḥammad al-Malik al-Ādil | Saif-al-Dīn Abū Bakr ibn Yūsuf.

One or two points in connexion with the legends merit brief comment. Al-Ādil Saif-al-Dīn died on 7th Jumādā II, 615, but his name continues to appear on the coinage as first overlord at Ṣan'ā' at least till 617, at Ta'izz until 620, and at Zabīd (and 'Adan?) till 622—a curious inadvertence. At Ṣan'ā' in 621 al-Ādil's name is omitted for the first time. Zabīd follows suit during the course of the year 622. The significance of the inscriptions on the issues of Zabīd and 'Adan in 627, and of 'Adan and the unknown mints in 628 are discussed below in the historical section. There is a lag—though not so pronounced as in the case of al-

‘Ādil’s name—in recording another event in the outside world, the death of the Caliph al-Nāṣir on the 30th Ramaḍān, 622, and the accession of al-Zāhir. We have only four issues of the year 623: Ṣan‘ā’ is “up to date” with al-Zāhir’s name, but Zabīd’s first issue of the year still bears al-Nāṣir’s name; then another die was cut carrying the name of al-Zāhir. There were three months between al-Nāṣir’s death and the first of the new year. All the issues from 624 on are correctly inscribed with the name of al-Mustanṣir who succeeded to the Caliphate in Rajab (seventh month), 623.

Quite a number of the specimens reveal badly rusted dies, and there are several remarkable examples of the re-use of dies. One of the Zabīd obverse dies of the year 612 was re-employed with three different reverse dies (nos. 31–33) on which the name of al-‘Ādil is omitted, i.e. 621 or later, to judge by the other specimens. In all probability these were intended for the year 622. The Zabīd mint sometimes used old reverses for succeeding years: 621 and 622 (nos. 24 and 28); 612 (=622) and 624 and 625 (nos. 32, 36, and 37); 612 (=622) and 626 (nos. 33 and 41). But surely the most remarkable instance of getting full value out of a die is the case of nos. 9 and 18: a reverse of Ta‘izz, year 612, was sent down from the hills to the capital, Zabīd, to be re-used in issuing coins in 614.

The Mints.

Of the seven mints represented in the hoard, ‘Adan and Ṣan‘ā’ are such familiar names that they require no particular mention. Ta‘izz, where ten of the specimens under discussion were minted, is situated in the mountains about 160 km. north-west of ‘Adan and

200 km. south of Ṣan'a', elevated 1347 m. above sea-level, and still exists as an important town of the Yaman. It was known to the Portuguese and Italians of the Renaissance as Teis and Taesa, and has been described in modern times by a number of travellers, notably Niebuhr, Sprenger, and Glaser. Local tradition imputes to the town a pre-Islamic existence, but it is Grohmann's judgement that this is unlikely. Yāqūt (d. 626/1229) describes Ta'izz as a great fortress-town; Ibn Baṭṭūṭa, who visited the town (then the capital) in 733/1333 in the days of the Rasūlid al-Malik al-Mujāhid 'Alī b. al-Malik al-Muayyad Dāwūd (721-764/1321-1363), tells us that it was one of the finest and largest cities of the Yaman; he disapproved of the temper of the inhabitants who were "haughty, boastful, and uncivil" (واهلها ذوو تجبر وتكبر وفضاظة), characteristics which the famous traveller felt to be common in capital cities. Ibn Khaldūn (d. 808/1406), who likewise knew Ta'izz as capital of the Rasūlid dynasty, speaks of the town as the greatest of the mountain fortresses overlooking the Tihāma (the narrow coastal plain), and states that the Ayyūbid Tūrānshāh adopted the site of Ta'izz as the seat of government (and founded the city), preferring its healthful air and water to that of Zabīd, where he had at first established the capital. Ibn al-Aṭhīr (d. 631/1234) mentions the "castle of Ta'izz" and says that Tūrānshāh captured it after he had taken Zabīd and 'Adan; in it were the treasures of the "lord of Zabīd". Thus the castle seems to have existed already, and to Tūrānshāh would go the credit for the founding of the town. In any case it was during the Rasūlid period (628-858/1231-1454) that the city achieved a marked cultural brilliance; five

schools were founded there between 628 and 721 (1231 and 1321), and there are several fine buildings of the period still standing.³

Zabīd is best represented in the hoard, there being thirty-five specimens in all from the mint of that city. It lies on the plain of the Tihāma, about 25 km. from the coast and an equal distance from the mountains, on the main 'Adan-Mecca route and about 330 km. north of 'Adan along that route. Ibn-Khurdādhbih (d. c. 300/913) places it 44 *farsakhs* from Ṣan'ā' (Ibn Baṭṭūṭa says 40). The town seems always to have had some commercial importance and a reputation for fertility. Zabīd existed in the first years of Islām, and when Ibn Khaldūn writes that Zabīd was founded (اُخْطِطَها) by Muḥammad b. Ziyād in 204/819-820) he means that it was Muḥammad, the first of the Ziyādid dynasty of the Yaman, who was responsible for the beginning of the city's prominence. It was then that the city took its present circular form with four towers, and it is said that Zabīd is still known as *al-Madawwara*, "the rounded". Al-Muḥaddasī (d. c. 391/1000) has left us a valuable description of the city in his time. He reports that it was a flourishing city, "the Baghdād of the Yaman", full of merchants and the learned and men of letters; the fortress had four gates (corresponding, we assume, to the four towers mentioned above), and the town was supplied with water by a canal (*kanāh*) introduced by "Ibn Ziyād". He

³ Yāqūt (ed. Wüstenfeld), I, p. 854; ibn-al-Athīr (ed. Tornberg), XI, p. 262; Ibn Baṭṭūṭa (ed. Défremery and Sanguinetti), II, p. 172; Ibn Khaldūn, text and transl. in H. C. Kay, *Yaman, its early Mediaeval History, &c.*, London, 1892, pp. 120-121, 126, 165-166, 173; A. Grohmann, s.v. Ta'izz in the *Encyclopaedia of Islām* (with full bibliography).

found fault only with the narrowness of the bazaars, the exorbitant prices, and the lack of fruits; he complained that the inhabitants' food consisted for the most part of millet and maize. At the time of Tūrānshāh's arrival in the Yaman, Zabīd was ruled by 'Abd al-Nabī b. 'Alī the Mahdid. If the number of specimens from each mint in the hoard is proportional to the importance of each city in Ayyūbid times—a not unreasonable assumption in view of the representative character of the collection—we can perhaps safely conclude that, in spite of Ibn Khaldūn's statement that Zabīd was abandoned for Ta'izz as the capital (see above), the former city in reality continued to be the principal seat of government, with Ta'izz as the official "hill-station". With the rest of the Yaman Zabīd passed into Rasūlid hands after the last Ayyūbid. Yāḳūt speaks of it as a famous city, and in Ibn Baṭṭūṭa's time (he visited Zabīd and Ta'izz the same year) the city was second only to Ṣan'ā' in size, and the population the most prosperous in the land.⁴

One specimen in the hoard, no. 14, was struck at a mint the name of which appears to read quite distinctly ريدح (Raydah). The only locality in the Yaman that seems even approximately to meet the requirements of this orthography is ريدح (Raydah). The last letter of the name as engraved on the coin is ريدح, and not ريدح. Is it possible that the correct spelling was known only to the local inhabitants and not to the geographers whose works have been pre-

⁴ Al-Muḳaddasī (ed. de Goeje), pp. 84-85; Ibn Khurdādhbih (ed. de Goeje), p. 142; Ibn Baṭṭūṭa, II, pp. 166-167; Ibn Khaldūn, *loc. cit.*, pp. 120-121, 165-166; R. Strothmann, s.v. Zabīd in the *Encycl. of Islām*.

served? Raydah is on the map of the British India Survey, located about 40 miles north and slightly west of Ṣan'ā'. Hamdānī (d. 334/945) mentions the town several times in the *Ṣifat Jazīrat al-'Arab* and in the *Iklīl*: it was 20 Arabian miles beyond Ṣan'ā' in the region of the Ḥāshid tribe of Hamdān, and possessed a lofty castle. Al-Bakrī (d. 487/1094) gives it a passing notice; Yāqūt repeats Hamdānī's information and notices that it lay a day's journey distant from Ṣan'ā' and was rich in springs and vineyards.⁵ This may well be our town; but the difference in orthography is a stumbling-block, and it is curious that a town important enough to have been a mint should receive no notice in the chronicles of political events in the Ayyūbid and Rasūlid periods (Ibn al-Aṭhīr, Abu'l-Fidā', Ibn Khaldūn, Maḳrīzī, al-Khazrajī).

As for the other two mints, represented by nos. 66-68, every effort to decipher the names has been unsuccessful. No. 68 is quite cryptic. Nos. 66-67 (the obverse dies identical) are little better: on no. 67 the mint name is almost entirely effaced, but on no. 66 the first letter seems to be a , or ;, and there are apparently three letters following, the first of the group not unlike a Kufic *kāf* or *dāl*; but as the inscriptions are in Naskhī it is difficult to determine what letter this might be.

Historical Sketch.

In Rajab, 569/February, 1174, the Ayyūbid Ṣalāḥ al-Dīn (Saladin) sent his elder brother, al-Malik al-Mu'azzam Shams-al-Dīn Tūrānshāh b. Ayyūb, on a

⁵ Hamdānī, *Ṣifat* (ed. Müller), pp. 66, 111, 186, and index, *Iklīl* (ed. al-Karmali, Baghdād, 1931), pp. 42, 119, and index; al-Bakrī (ed. Wüstenfeld), p. 433; Yāqūt, II, pp. 885-886.

campaign that was destined to bring the Yaman under a united rule for the first time since early in the third (ninth) century. That at such a time Ṣalāḥ al-Dīn should have conceived the project of extending his dominion to so distant a land has puzzled more than one historian. Various explanations have been advanced. It has been said that he feared that his nominal overlord Nūr al-Dīn Maḥmūd, the Zangid Atābeg, might one day resent his too great show of independence in Egypt, and that if and when necessity demanded, he could then find safe refuge in South Arabia. Then, also, we hear that Ṣalāḥ al-Dīn's orthodox convictions revolted against the thought of the Yaman's being ruled by Khārijīs and Shi'īs. Again, it had become an historical convention that he who ruled Egypt controlled the Holy Cities as well. Finally, the most picturesque—and tragic—of the reasons, the Yamanid poet 'Umāra, resident in Egypt, so eulogized the wealth and luxury of his native land that its conquest was an irresistible temptation to Ṣalāḥ al-Dīn and Tūrānshāh. The only misfortune was 'Umāra's: accused of complicity in a plot to restore the Fāṭimid rule in Egypt (for this reason they say he desired Tūrānshāh's absence), he was crucified along with other conspirators. Somewhere among or between these explanations lies the truth.

At the time Zabīd was ruled by the Maḥdid 'Abd-al-Nabī b. 'Alī, Ṣan'ā' by the Ḥamdānid 'Alī al-Waḥīd b. Ḥātim, and 'Adan by the Zurai'id Muḥammad b. 'Imrān of the Banu'l-Karam. Within six months Tūrānshāh had taken possession of all three cities (first Zabīd, then 'Adan and Ṣan'ā') and proceeded to establish his capital at Zabīd. From the first he seems to have been dis-

content with his post: his displeasure with the climate of Zabīd has been noted above, and Ibn Khallikān dwells at some length on the prince's unfavourable opinion of a land so sterile. He pined for Damascus; he even offered a thousand pieces of gold for a little snow to cool his water and (like Muḥaddasī) for a few of the fruits of Syria. Even that price could not purchase them in the Yaman, for they were not to be had, and Tūrānshāh asked in disgust what he was to do with his money. It could not be eaten, he said. Were his sensations perhaps somewhat like those experienced by Aelius Gallus during his disastrous expedition to South Arabia some twelve hundred years before? In any case by Ramaḍān or Dhu'l-Ḥijja, 571/March or June, 1176, Tūrānshāh was back in Syria with the permission of Ṣalāḥ al-Dīn; his lieutenants governed the Yaman for him and he himself never returned. Till 575/1180 he ruled at Baalbek, then Alexandria, till his death in Ṣafar, 576/June, 1180.

Tūrānshāh was succeeded in the Yaman in 577/1181-2 by his brother al-Malik al-'Azīz Saif-al-Islām Abu'l-Fawāris Ṭughtekīn, who was largely responsible for cementing the discordant elements of the newly united dominion. He died in Shawwāl, 593/August, 1197 in or near Ta'izz, or, according to another authority, at al-Manṣūra, a town founded by himself. His son and successor Ismā'il ruled till his assassination in Rajab, 598/March, 1202. The next ruler, al-Malik al-Nāṣir Ayyūb, also a son of Ṭughtekīn's, is the first of the dynasty to have struck coinage, or at least the first whose coinage is preserved (nos. 1-8, above). His death, also by assassination, occurred in 611/1214. The following year the chief of the Ayyūbid family in

Egypt and Syria, al-Malik al-ʿĀdil, sent his grandson, al-Malik al-Masʿūd Yūsuf b. al-Kāmil, then a boy only twelve years old, to the Yaman. Accompanied by a large army and with the help of ʿAlī b. Rasūl (ancestor of the subsequent Rasūlid dynasty), the lad was able to replace his second cousin once removed, al-Muẓaffar Sulaimān, who had profited by the occasion of al-Nāṣir Ayyūb's assassination to take possession of the Yaman during the interregnum. Yūsuf had arrived in Zabīd on the 2nd Muḥarram, 612/May 3, 1215; finding that Sulaimān had established himself in the fortress of Taʿizz, he at first attempted to treat with his cousin on terms that would permit Sulaimān to retain the mountain towns while he (Yūsuf) controlled the lowlands; but, encouraged by the Rasūlid, the boy marched his army up to Taʿizz (10th Ṣafar, 612/June 10, 1215) and took Sulaimān prisoner. In the following years Yūsuf's indebtedness to ʿAlī b. Rasūl and his family increased: ʿAlī added the Ḥijāz to the Ayyūbid dominion and in 619/1222 Yūsuf showed his appreciation by granting ʿAlī the governorship of Mecca; and other members of the family held important posts throughout the Yaman.

Between Ramadān, 620/September, 1223 and Ṣafar, 624/January, 1227 Yūsuf was absent in Egypt. During these years which were troubled by various revolts described in some detail by al-Khazrajī, Nūr al-Dīn ʿUmar b. ʿAlī b. Rasūl acted as vice-regent in the Yaman. When Yūsuf returned in Ṣafar, 624/January, 1227, it was apparent that the vice-regent and his family had established themselves more firmly than he had intended. Four months later he seized three of ʿAlī's sons and sent them off to ʿAdan and Egypt in

bonds, sparing only Nūr al-Dīn 'Umar. Two years later, in Rabī' I, 626/January, 1229 (or 625/1228 according to another authority) Yūsuf set out for Egypt again, having been sent for by his father, al-Kāmil, who wished to have Yūsuf succeed in the rule of Damascus to al-Malik al-Mu'azzam 'Īsā who died in 624/1227. Yūsuf, like Tūrānshāh, was only too glad to leave the Yaman; although he was ill he only delayed his departure long enough to load ships with his treasures (and the treasures of others as well, it seems) and to advise Nūr al-Dīn 'Umar that he was leaving the Yaman in his charge, that in the event of his (Yūsuf's) death, Nūr al-Dīn was to succeed to the sovereignty, and that he would discredit any effort on the part of his family to establish themselves.⁶ Yūsuf never reached Egypt: he died in Mecca, according to various historical accounts in Rajab or Sha'bān, 625/June or July, 1228, or in Rabī' I, 626/January, 1229, or the 14th Jumādā I, 626/April 9, 1229. On the evidence of the coins in the hoard (nos. 42, 61, 62, 63, 64) the year 625 as the date of the prince's death is almost certainly to be discredited. The fact that no. 42, dated 627, bears Yūsuf's name should rule out the 626 date as well and fix his decease in 627; but with the example before us of the coins between 616 and 622 bearing al-'Ādil's name as first overlord, when he died in 615, we cannot be absolutely certain that coins bearing al-Mas'ūd Yūsuf's name were not struck after his death. Perhaps we are to take al-Khazrajī's

⁶ So says al-Khazrajī who, however, might easily be accused of a biased attitude in favour of the Rasūlids. Such a statement as this was calculated perhaps to lend a colour of legitimacy to the origin of the Rasūlid dynasty.

statement literally, that when Yūsuf died and the news of his death reached the Yaman, Nūr al-Dīn concealed his aspirations towards independence, and outwardly made a show of being al-Mas'ūd's lieutenant, making no change in the coinage or the *khutba* (al-Khazrajī, iv, p. 46). If al-Mas'ūd's death were not generally known, Nūr al-Dīn might have concealed the knowledge and pretended still to be the Ayyūbid's representative, and thus the issues of 627 with Yūsuf's name would be explained by this passage. On the other hand, if Yūsuf's death in Mecca were immediately general knowledge, which is more likely, the passage could only explain the issues of 627 bearing the name of the Ayyūbid overlord, al-Kāmil, alone. There remains therefore the likelihood that the date of Yūsuf's death is to be placed in 627 rather than 626, for the remaining issues (nos. 62-68) prove that the Ayyūbid coinage of the Yaman did not cease when Yūsuf died, and at least three mints ('Adan and the unknown mints) cut new dies before the Ayyūbids were formally replaced by the Rasūlids.

Between 627 and 630 (1230 and 1233), according to al-Khazrajī, Nūr al-Dīn 'Umar b. 'Alī the Rasūlid was busy consolidating his new kingdom, and it is apparent that the entire country did not immediately respond to his leadership. In *Shawwāl*, 626/August, 1229, to accept al-Khazrajī's chronology, he besieged Ta'izz; in 627 he took the forts of Ta'kar, Khadad and Ṣan'ā'; in 628, Ḥabb and Bait 'Izz. In the latter year Ta'izz finally succumbed, and the Sharīfs of Dhamarmar capitulated. In 629 the forts of Bukur, Kawkabān, and Birsāh fell, and in the same year Nūr al-Dīn besieged Mecca's Ayyūbid governor. In fact the next

fifteen years are filled with his military exploits and many of the towns needed repeated suppression; thus it is not easy to set a fixed date at which one can say that the undisputed Rasūlid rule of the Yaman began.⁷

In any case the last seven coins of the hoard furnish us with certain evidence of the unsettled state of affairs. Nos. 62, 63, and 64, struck in 'Adan in 627, were issued by some one on al-Kāmil's authority and bear al-Kāmil's name only. When Nūr al-Dīn brought 'Adan under his rule is not known, but at all events it is probable that these issues are *not* Nūr al-Dīn's, for the remaining coins (nos. 65-68), one of 'Adan and three of the unknown mints, all struck in 628, were not issued by the Rasūlid but by an unidentified, almost certainly Ayyūbid, prince al-Malik al-'Ādil Saif-al-Dīn Abū Bakr (b.?) Yūsuf, again on the authority of the overlord al-Kāmil of Egypt. The word "ibn" or "bin" ("bn") has been enclosed in parentheses and questioned in the descriptions because on three of the

⁷ Ibn-Khaldūn (*loc. cit.*), pp. 120, 165; 'Alī b. al-Ḥasan al-Khazrajī, كتاب العقود اللؤلؤية في تأريخ الدولة الرسولية, ed. Muḥammad 'Asal, Gibb Memorial Series, III, vol. 4, pp. 29-54; transl. *The Pearl-Strings*, &c., Sir J. W. Redhouse, ed. Browne, Nicholson, and Rogers, Gibb Memorial Series, III, vol. 1, pp. 75-97; ibn-Khallikān, de Slane, I, pp. 284-287, 655-656; ibn-al-Athīr, XI, pp. 260-262, 288; XII, pp. 268-269; Maḳrīzī, *al-Sulūk*, ed. Muḥammad Muṣṭafa Ziyādah, Cairo, 1934, vol. I, pt. I, pp. 52, 181, 237; transl. Blochet in *Rev. de l'Orient Latin*, IX, 1902, p. 157; X, 1903-1904, pp. 253, 260; R. Strothmann, s.v. Tūrānshāh, *Encycl. of Islām*; A. S. Tritton, s.v. Rasūlids, *Encycl. of Islām*; S. Lane-Poole, *The Muhammadan Dynasties*, p. 98; S. Lane-Poole, *Cat. of Oriental Coins in the B.M.*, V, pp. xxxviii-xl; E. de Zambaur, *Manuel de Généalogie*, &c., p. 98; Halīl Edhem, *Düwvel-i-Islāmiyeh*, Istanbul, 1927, pp. 102, 129; S. Lane-Poole, *Saladin and the Fall of the Kingdom of Jerusalem*, N. Y. and London, 1898, pp. 125-126.

specimens the word is not clearly preserved; and on the other, no. 67, بن looks more like an ornament than part of the word ابن. But in all probability "ibn" (or "bn") is to be read and the prince is "son of Yūsuf". The *laqabs*, al-Malik al-ʿĀdil Saif-al-Dīn Abū Bakr, it will be noticed, are exactly identical with those employed by al-Kāmil's father, al-ʿĀdil Aḥmad, the brother of Ṣalāḥ al-Dīn, and also identical with those of a son of al-Kāmil's, al-ʿĀdil II, who ruled Egypt and Damascus from 635 to 637/1237 to 1240. Were it not for the "ibn Yūsuf", one would readily jump to the conclusion that the prince in question was the latter al-ʿĀdil, who, born in 617/1220, might well have been a logical successor to the Yamanid rule. But we cannot overlook the last line of the inscription. If the Yūsuf under consideration is al-Malik al-Masʿūd Yūsuf, then we have to do with a son of the last known Ayyūbid prince of the Yaman, and these coins would be evidence of an attempt on the part of a direct heir to hold the country against Nūr al-Dīn, the Rasūlid.

Now we are sure that Yūsuf had at least two sons, and possibly three: al-Aḥraf II Mūsā,⁸ who was to become the last and purely nominal Ayyūbid king of Egypt, from 648 to 650/1250 to 1252; Ṣalāḥ al-Dīn Yūsuf, who received the same title as that of his father, i.e. al-Malik al-Masʿūd⁹; and (perhaps) a third son named al-Kāmil, who was not to be credited as successor even if he should arrive folded up in a letter,—so we are told Yūsuf instructed Nūr al-Dīn before his last trip to

⁸ Zambaur (*op. cit.*, table H B) gives only this one son of Yūsuf's in his genealogical table. The date of his birth as given there (642) must, of course, be an error.

⁹ Maḥrīzī, text, p. 237; Blochet, *loc. cit.*, X, p. 253.

Mecca.¹⁰ Did Yūsuf have another son or is our al-ʿĀdil Saif al-Dīn Abū Bakr perhaps to be identified with either al-Kāmil of Khazrajī or Ṣalāḥ al-Dīn of Maḳrīzī? Honorary titles are often not the same on the coins and in the books, and it is not unlikely that the titles of so obscure an individual should have been wrongly given in the chronicles. Still, the greater probability is that we have met in these coins with another son. The problem is hardly one that can be solved at present, and we must leave the identity of the last Ayyūbid prince of the Yaman an open question.

As for the early coinage of the first Rasūlid, Nūr al-Dīn, we can only wish for a hoard such as the Ayyūbid one under discussion. Al-Khazrajī (iv, p. 51) tells us that Nūr al-Dīn did not strike coins in his own name till the year 630/1232-3. H. Nützel, in a monograph on Rasūlid numismatics,¹¹ quotes a later authority¹² to the same effect: i.e., in 626, on Yūsuf's death, Nūr al-Dīn did not change the coinage, and only began to issue his own coins in 630. The few published specimens of the copper coinage of the period¹³ are partial confirmation: they bear the name of the Ayyūbid al-Kāmil alone and are Rasūlid coins only by virtue of the circumstance of their dates and the mints at which

¹⁰ Al-Khazrajī, iv, p. 41: ولو جاءك الملك الكامل ولدي مطوّباً في كتاب. We say "perhaps" because one cannot avoid suspecting that ولدي is an error for والدي. Cf. a patent error in the text on p. 40.

¹¹ H. Nützel, *Münzen der Rasuliden nebst einem Abriss der Geschichte dieser jemenischen Dynastie*, Berlin, 1891, p. 29.

¹² كتاب انباء الزمن في اخبار اليمن by Yaḥyā b. al-Ḥusain b. al-Muʿayyad bi-Allāh.

¹³ Nützel, *op. cit.*, pp. 34-40.

they were struck (Zabīd and Ta'izz). As late as 634 (Nützel, no. 3) al-Kāmil's name is still the only one on the copper coinage; no *dirhams* have been preserved, so we cannot say whether the silver also was "anonymous". In 635/1238, the year of al-Kāmil's death, Nūr al-Dīn's name appears for the first time with the titles al-Malik al-Manṣūr and his own name 'Umar (Æ, Nützel, no. 12). Thus, thirteen years before the Bahrī Mamlūks put an end to the Ayyūbid rule in Egypt, we witness the passing of Ṣalāḥ al-Dīn's ephemeral empire in South Arabia.

GEORGE C. MILES.

ERRATA

In *N.C.*, 1938, p. 285, I have referred to a grant by Henry II to William Marshal, Earl of Pembroke, of the land of Leinster, in which there was a saving clause whereby the King reserved to himself the right of coinage. Mr. Herbert Wood, late Deputy Keeper of the Public Records in Ireland, who kindly informed me of the grant in the first place, now tells me that he has reluctantly come to the conclusion that he cannot substantiate an earlier grant than the charter of John 1207. The earliest certain reference to the coinage still remains, therefore, in the year 1200.

On p. 286 by a printer's error the names of *Walter* and *Simund* have been reversed. *Walter's* coins bear the mint signature Ken . . . and *Simund's* Kil . . .

D. F. A.

IV.

MORE COINS FROM THE JOHORE RIVER.

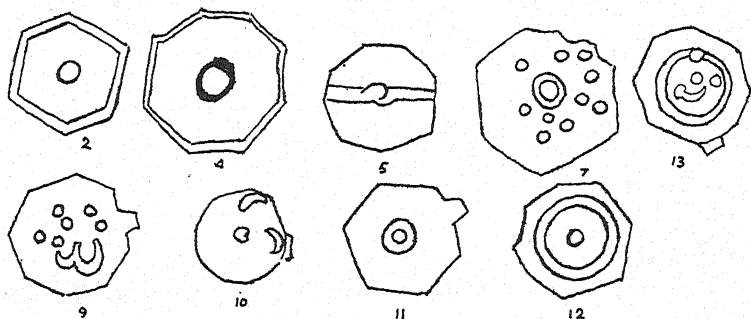
OLD coins have been found at various sites on the Johore River. The best known are the gold coins which the Malays call *mas dinar*, but the most common are the tin coins known locally as *katun*. They are stated to be the "cents" of the mas dinar, but no one can now say how many went to make the gold dinar. In 1559, however, John Davis visited Achin in a Dutch ship, the *Lion*, and he tells us: "I saw two kinds of money gold and lead, the gold is called mas and the lead is called caxas (Cashas). 1,600 caxas make one mas. 400 make a cowpan." This, probably, gives us the correct ratio.

Of the katun I have collected, about 80 per cent. have no inscription. They are commonly uniface and bear nothing but a raised dot, sometimes with a bar in addition. This raised dot is called *pusat* by the Malays. These, being the most common, are, I think, certainly Johore coins. D'Albuquerque mentions the Sultan of Malacca's pewter coins, and it is probable that the Sultan of Johore would continue to coin tin money.

The katun were cast in "branches" (*keneri*), and bits of the broken ends of these branches can be noticed on the edges of a number of specimens. They are mostly in such poor condition that drawing has been found the only means of reproduction.

The most conspicuous feature of these Johore River katun is that they are nearly all either hexagonal or octagonal.

They may be divided roughly into two divisions, (A) Uninscribed, and (B) Inscribed.



A. In this division we have the following varieties, all uniface :

Nos. 1 and 3 Pusat only.

2 and 4 Pusat and raised rim.

5 and 6 Pusat and bar.

7 Circle and dots.

8 Dot only.

11 Circle only.

12 Pusat and circle.

14 Pusat and six circles.

15 Pusat only (a fragment of a larger coin ?).

Coins Nos. 9, 10, and 13 appear to be of an intermediate type. They are uniface and have dots, a pusat, or a circle, but seem in addition to have an attempt at an inscription in each case.

B. The second division consists of inscribed coins.

No. 18 is the most important of these as it bears an inscription on the obverse "Dar al-Joharah" (The State of Johore) for the reading of which I am indebted to Ungku Hamid. The reverse has not been read.

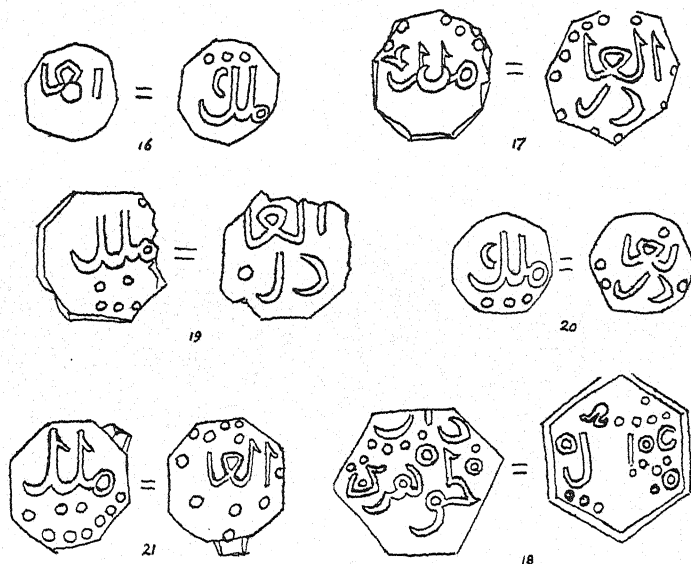
No. 23 may be another specimen with a similar inscription.

After this comes a series which have the following inscription :

Obv. ملك *Malik* } = "The Just King".
 Rev. العادل *al-Ādil*

Nos. 17, 19, 20, 21, and 28 are of this type.

No. 22 has *Malik al-Ādil* on both sides.



This title was used by the Sultans of Pahang and Kelantan, so it is possible that these may be coins of one or other of these States. This inscription is also used on coins attributed by Millies to Trengganu.

The last part of division B consists of a group with inscriptions too fragmentary to be read.

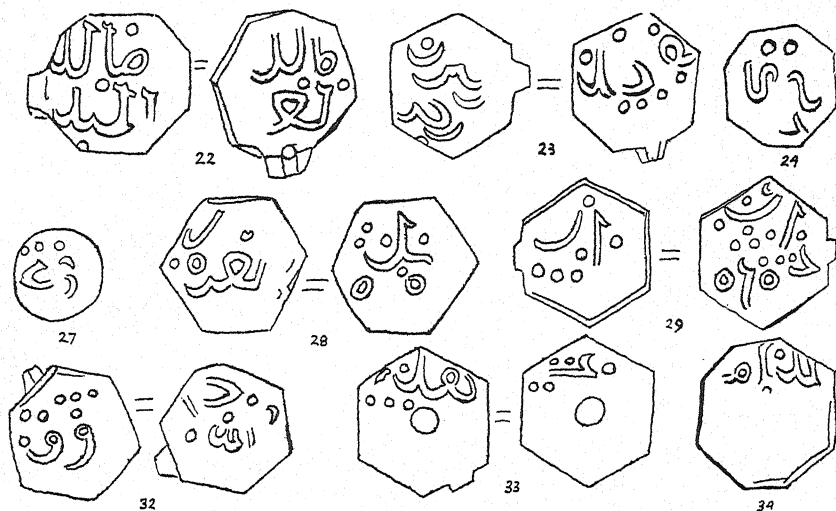
Nos. 24, 26, and 34 are unfaced and polygonal.

Nos. 25, 27, 30, and 31 are unfaced and round.

Nos. 23, 29, 32, 33, and 35 are polygonal and inscribed on both sides.

The Raffles Museum has a number of tin coins, but none of this Johore River type. I have, however, four

more coins, also from Johore River, which are of the type in the Museum (from Malacca) and which are identical with coins in the Royal Batavian Society's



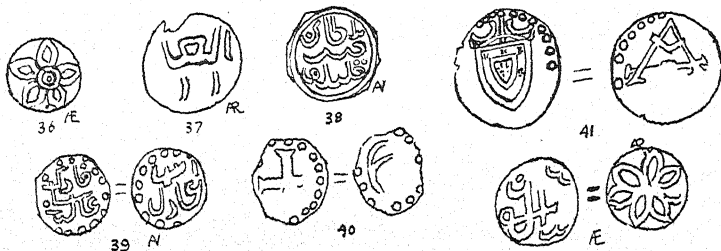
Museum, where they are described as having been issued by the Sultans of Malacca.

Nos. 42, 43, and 45 have traces of inscriptions on both sides.

No. 44 has on one side the remains of "Al-Sultān al-ʿAdil".

I also acquired some small bronze coins. They are badly corroded, but on some of them it is possible to make out the device. It is similar to that on the Kelantan gold coins (*vide* Linehan, *J.M.B.R.A.S.*, August 1934, Plate X) and is known as the mata hari. I think that this sign is really the open lotus flower of the Buddhists, who were very strong in Kelantan and Trengganu in the old days. I took these coins there myself some

time ago, but could find no one who had ever heard of any such coins having been used or found there. The copper coins mentioned by Joseph Haas as being in use when Trengganu belonged to Siam are clearly from his description the Birmingham one keping tokens



imported by British merchants (*vide* Ellis, *Num. Chron.*, 1895, Part II, p. 147, no. 17).

No. 36 (Obverse only) Flower of five petals.

No. 42. *Obv.* Flower of seven petals.

Rev. المالک al-Malik (?).

Copper coins of Malayan manufacture are extremely rare, and silver is almost equally so. I have one Malayan silver piece in this collection.

No. 37. (Obverse only) العدل al-Ādil (?).

It is much corroded.

Two gold coins are amongst the Johore River finds.

No. 38 is a quarter dinar of 'Abd al-Jalil of Johore. The inscription is normal, but it is remarkable for having a round die (cf. the dinar no. 11 in my article in the *J.M.B.R.A.S.*, 1933, vol. xi, part II).

No. 39 is Sumatran (Millies, Pl. XVI, no. 145, Achin).

Obv. شاه عالم Paduka Shāh 'Ālam.

Rev. اسم عادل Isma 'Ādil (Sir R. Winstedt reads it as Mahā 'Ādil).

The last two coins which I figure are Portuguese:

No. 40 is tin. *Obv.* Cross.

Rev. Armillary Sphere.

I am not able to identify this exactly—it may be a contemporary imitation.

No. 41 is a silver tanga.

Obv. Arms of Portugal crowned.

Rev. Monogram MA for Malacca and T for Tanga.

The date which should be about 1630 is invisible (*vide* Grogan in *Numismatic Circular*, November, December, 1916, p. 610, no. 27 A).

Of the coins described, some are now in the British Museum. Some are in the Abbey Folk Park, New Barnet, where no. 18, the unique Johore coin, may be seen, together with the only known early coin of Kedah (described by me in the *J.M.B.R.A.S.*, December 1933). The remainder were exhibited on loan in the Singapore Museum and were reported missing. Some time after the casts of the ancient gold coins from the same source (described by me in the *J.M.B.R.A.S.* of the same date) disappeared from the same case, so these are no longer available for public inspection.

I have to thank Mr. C. H. Dakers of Perak for all his kind assistance.

I would be much obliged for information as to whether coins similar to these have been found elsewhere, and also for any further particulars which would enable me to identify these Johore River coins more accurately.

G. B. GARDNER.

MISCELLANEA.

THE DEWSBURY HOARD, 1938.

THIS little hoard of 27 denarii was found at Thornhill in the parish of Dewsbury, September, 1938. The coins were distributed over reigns as follows:

Otho	1	Hadrian	5
Vespasian	6	Antoninus Pius	3
Domitian	4	Marcus Aurelius	3
Trajan	5		<u>27</u>

The following coins were included:

OTHO. 1. M. & S.,¹ i, p. 219, no. 12, 3 (C. 15).

VESPASIAN. 6. M. & S., ii, p. 19, no. 37 (C. 661); p. 23, no. 75 (C. 362); p. 24, no. 86 (cp. C. 111); p. 29, no. 131 (1 r.-C. 28, 2 l.-C. 30).

DOMITIAN. 4. M. & S., ii, p. 43, no. 242 (C. 49); p. 171, no. 150 (C. 259); p. 173, no. 169 (C. 271-2).

TRAJAN. 5. M. & S., ii, p. 245, no. 10 (?-C. 213); p. 248, no. 59 (C. 241); p. 264, no. 294 (C. 577); p. 267, no. 331 (C. 190); and one of uncertain reverse.

HADRIAN. 5. M. & S., ii, p. 359, no. 162 (?-C. 337); p. 360, no. 175 (cp. C. 374); p. 362, no. 201 (C. 461); p. 367, no. 230, a (C. 172); p. 370, no. 261, d (Var. *rev.* no globe (?): cp. C. 1204).

ANTONINUS PIUS. 3. M. & S., iii, p. 37, no. 98, c (C. 467); p. 51, no. 205 (C. 267); p. 60, no. 285 (C. 331).

MARCUS AURELIUS. 3. M. & S., iii, p. 218, no. 59 (cp. C. 39); p. 226, no. 163 (C. 878); and one barbarous, *obv.* obscure, *rev.* COS II. Honos standing l. holding branch and cornucopiae, as M. & S., iii, p. 80, no. 429 (cp. C. 110).

A little hoard, of similar character, also from Dewsbury, was examined in the museum in 1925. It contained 26 denarii, 1 of Vitellius, 4 of Vespasian, 3 of Domitian, 8 of Trajan (including one of Matidia), 10 of Hadrian (including one of Sabina).

The latest coin is dated A.D. 166 (Marcus Aurelius—TRPXX).

HAROLD MATTINGLY.

¹ References are to Mattingly and Sydenham, *Roman Imperial Coinage*, vols. i-iii, 1, 1923, and Cohen, *Description historique des Monnaies frappées sous l'Empire romain* (2nd edition), vols. i-iii, 1880.

IV.

IRENE DUKAINA.

WIFE OF THE EMPEROR ALEXIUS I.

THE marriage of Alexius Comnenus with Irene, the grand-daughter of the Caesar John Dukas, was destined to unite the two great feudal families of the Comneni and the Dukai on the Byzantine throne. Alexius was a successful young general at the time, and Irene but a girl of thirteen. Her daughter, the royal-historian Anna Comnena, tells us that she was possessed of great beauty, with a face "like the moon", rosy cheeks and blue eyes, and with arms and hands looking as if they had been carved out of ivory. The marriage was essentially a diplomatic one, and little love seems ever to have existed between the ill-assorted pair. It was not until his later years that Alexius came to appreciate the worth of his wife, and then more as a nurse than anything else. It is tolerably certain that, upon finding himself in possession of the throne, he was prepared to put away his girl-wife and espouse the notoriously beautiful Maria, the wife of the Emperor he had supplanted. Had it not been for the chivalrous action of the young commander of the fleet, George Palaeologus, who championed the cause of Irene, there is little doubt but that the Empress Maria would have found herself for the third time the consort of a Byzantine emperor. But, even as it was, Alexius hesitated, and refused to allow his wife to be crowned

with him. Popular feeling, however, ran so high that he had to give way, and Constantinople saw a second coronation within the space of one week.

The Empress does not figure very prominently in the more active days of her husband's long reign, but in his later years, when he had become a martyr to gout, we see her nursing him with apparent solicitude and devotion. But if we are to believe the story of the death-bed of Alexius which has come down to us, it was with devotion to duty rather than to the man. All the pent-up bitterness of her married life seems to have escaped into the words she is reported to have addressed to her dying husband on finding that, during her temporary absence from his bedside, he had connived at the transfer of the imperial signet to his son John. "Husband", she is said to have said, "while you lived you were full of guile, saying one thing and thinking another; you are no better now that you are dying."

Such, in brief, is the story of Irene Dukaina. After her husband's death she changed her name to Xene and retired into a monastery which she had herself built in Constantinople. "Fifteen years later," says Mr. McCabe, to whose *Empresses of Constantinople* I am largely indebted, "when another Irene came from the West to wed the Emperor Manuel, she noticed among the crowd of notabilities who welcomed her to the city an aged lady whose dark monastic robe was relieved by strips of purple and edges of gold. When she asked the name of the royal nun, she learned that it was the widow of the great Alexius."

It is, of course, useless to look to Byzantine art for confirmation, or refutation, of Anna Comnena's description of her mother's personal appearance, but the

coinage of the period does provide us with at least one conventional representation of the Empress Irene.

In the British Museum is a billon nomisma (fig. 1) to which a special interest attaches on account of it having once belonged to Sabatier, and having been presented by him to the Museum "en reconnaissance de

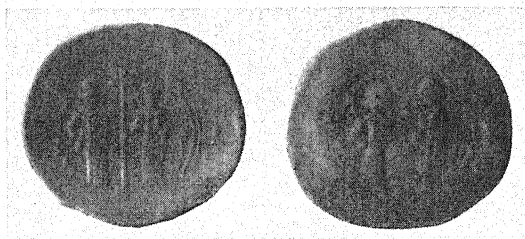


FIG. 1.

la complaisance et des bons procédés de MM. les conservateurs à mon égard". It is a nomisma of Alexius I with his wife Irene and son John II. At the time of the gift Sabatier believed the coin to be unique, and he attributed it in his *Monnaies Byzantines*, vol. 88, pp. 202, 203, to John II with Alexius and another of his brothers, possibly Manuel. Subsequently, however, he became aware of another example, this time in gold, in the Hoffman collection, and he himself described it in *Annuaire de la soc. franç. de num.*, 1868, p. 292. From this example, which was apparently in better condition than the coin presented by him to the British Museum, it became clear that the nomisma did not belong to the reign of John II, but to that of his father, Alexius I, and that the figures accompanying the Emperor were those of his wife Irene and son John.

Wroth takes his Type 7 in the *British Museum Cata-*

logue of Byzantine Coins from Sabatier's description of the Hoffman coin, and the billon coin presented by Sabatier becomes no. 24 in the list of coins of Alexius I in the Museum Catalogue (*B.M.C.*, vol. ii, p. 544).

Both the gold and the billon coins are still exceedingly rare, especially the gold, but I have had the good

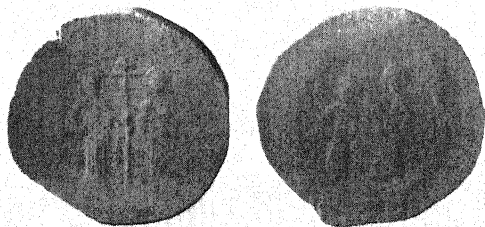


FIG. 2.

fortune to become possessed of a specimen in each metal, and this enables me to make slight corrections in the description of the coins hitherto published.

In the British Museum Catalogue Type 7 is described as follows:

Obv. +ΛΛΕΖΙΩΔC ΕΙΡΗΝΑΥΓΛ On l. Alexius I, bearded; on r., Irene; both standing facing, wearing crowns and long robes, and holding between them patriarchal cross. Alexius holds mappa (?) in r. Border of dots.

Rev. +ΚΕΡΟΗΘΕΙ ΙΩΔΕCΠΤ On l., John II Comnenus, beardless, standing facing, wearing crown and long robes: in r., labarum; in l., globus cr. On r., Christ, bearded, standing facing, crowning John II, and holding book of Gospels in l. IC XC above. Border of dots.

On my gold coin (fig. 2) the legend is missing on the right of the obverse. This is often found on scyphate coins, and is possibly due to the tilting of the die on receipt of an ill-directed blow. The name ΛΛΕΖΙΩΔ is quite legible on the left side, and the object held by the

Emperor, which Wroth queries, is unmistakably the mappa. The reverse legend reads ΚΕΡΟΗΘ ΙΩΔΕCΠΟ not ΚΕΡΟΗΘΕΙ ΙΩΔΕCΠΤ, and I can see no trace of the globus cruciger in the left hand of the Emperor John.

The obverse legend on my billon coin is complete and reads +ΛΛΕΖΙΩΔ ΕΙΡΗΝΙΑΥΓ. There is no sign of a further letter at the end of the legend. In other respects, with one exception, the billon nomisma closely resembles the gold. The exception is the crown of the Empress Irene. On the gold coin it is similar to that worn by the Emperor, but on the billon it has the pointed arches usually found on the crowns of Byzantine empresses from the time of Irene, the mother of Constantine VI. What these "arches" exactly were it is difficult to say. Wroth calls them "projecting ornaments," or simply "projections" in describing the crowns of the Empress Irene, but it is possible they originate in the rays of the radiate crown of an earlier date. On the well-known figure of a Byzantine empress on the fragment of an ivory diptych in the Bargello at Florence they actually appear as arches enclosing what may possibly have been a velvet cap, much as we see them on modern crowns. The empress on the diptych has been identified by some as the Empress Licinia Eudoxia, wife of the Western Emperor Valentinian III, and by others, with greater probability, as the Empress Irene, mother of Constantine VI, but whoever the royal personage represented, it is noteworthy that the solidi of both these Empresses, although separated by some three hundred and fifty years, show these projecting ornaments on the crowns. Moreover, the possibility of their derivation from the radii of the radiate crown finds some support in the coinage of the

earlier of the two Empresses. On the solidus of Licinia Eudoxia struck at Rome the projections are prominent, but on the corresponding solidus struck at Ravenna they are replaced by six rays.

The reverse of my billon coin resembles the gold, and has the same reading.

Wroth conjectures the coins of Alexius I with his wife Irene and son John to have been struck in the year 1092 when Alexius associated his young son with him on the throne. They belong to the period of the debased coinage, but the gold, although poor, makes no approach to electrum.

This representation of the Empress Irene Dukaina is, as far as I know, the only one which has come down to us, unless the second figure on a bronze nomisma in the Ratto sale (no. 2089 in the catalogue) is, as M. Ratto thinks, also intended for her. The coin, which is described as "unpublished", would seem to belong to that large class of bronze scyphate coins which are so tantalizing owing to the absence, or illegibility, of their legends. The coin *may* be of Alexius I and Irene—the type certainly suggests it—but I am by no means satisfied that the figure on the right is that of a woman. Not merely does not the crown—at least in the photograph—show the usual pointed "arches", but the characteristic shield-shaped fold of the robe below the waist is absent. Further, the occasion for the issue of such a coin has to be taken into consideration. Having regard to the Emperor's reluctance to recognize his wife as his consort on the throne, and to the hurried circumstances attendant on her ultimate coronation, it is hardly likely that this event was the cause of the issue, but what other episode can be suggested? In

default of the appearance of another, and better preserved, example of M. Ratto's coin upon which the names of the imperial personages represented can be read, I think we must be content to regard the representation of the Empress Irene Dukaina on the nomismata here illustrated as the only one which has descended to our day.

HUGH GOODACRE.

V.

SITE-FINDS FROM RICHBOROUGH, INCLUDING A SCATTERED HOARD OF DIADEMED "MINIMI".

[SEE PLATES VI-VII.]

ON September 10, 1931, three men, employed by H.M. Office of Works at Richborough Castle, while engaged in clearing the surface layers at the south-west angle of the fort, chanced upon some scores of coins about 2 ft. 3 in. below the surface. The site from which the coins came was bounded by the burnt remains of a wattle and daub hut. It was over a long narrow patch of firm soil at the foot of these remains that the coins, 1221 in all, were spread. Minute though they were, the coins came under notice because of their greenish tinge, as the earth was scraped by the spades. But, though much time was spent in collecting them, it is only too probable that many were carried away and lost in the dump.

After the 10th of September one of the authors (Mr. Stebbing) was in charge of the site and superintended the collection of further coins, washing the earth and passing it through a sieve—in fact, taking every precaution to ensure that everything findable should be found. An assortment of seventeen coins found on the top of the burnt remains was so similar in character to the hundreds collected 15 in. below, as to suggest that the hoard was intimately related to the

wattle and daub hut. Many of the coins were found within a depth of 6 in. from the hard earth below the burnt remains; but more than half came from a little rubbish-pit at the south-west angle, 17 in. deep.

The circumstances of finding in themselves suggested that the coins belonged to one or more hoards, and subsequent examination only served to confirm the suggestion. In particular, the diademed "Minimi", imitating the famous "Fel. Temp. Reparatio" type, with similar but less defined varieties, had every appearance of belonging together. They belong to a class hitherto only represented at Richborough by isolated examples. At the same time, it was quite impossible to determine, by any objective test, which of the coins collected belong to the hoard or hoards and which were casual deposits. We have had no choice, therefore, but to record the material as a whole, leaving the elimination of intruders to the future, when more of the composition of late hoards is known.

A summary description of the coins follows, divided into

- A. Regular issues.
- B. Imitations of definite types.
- C. Miscellaneous—including imitations of uncertain types, fragments of regular or irregular issues, and coins entirely uncertain.

The references are to Cohen, *Description historique des monnaies frappées sous l'Empire romain* (Second Edition, Paris, vols. Vff. (C.), and Mattingly and Sydenham, *The Roman Imperial Coinage*, vol. V, 1 and 2, by Percy H. Webb, London, 1927, 1933 (M. & S.).

A. REGULAR ISSUES.

GALLIENUS. 1. M. & S., V, 1, p. 150, no. 226, *obv.* K.
(C. 243.)

CLAUDIUS II. 1 (fragment). Cf. M. & S., V, 1, p. 233,
no. 259. (Cf. C. 47.)

TETRICUS I. 1. Cf. M. & S., V, 2, p. 409, nos. 100 ff. (?)

PROBUS. 1. M. & S., V, 2, p. 31, no. 129. (C. 727.)

CONSTANTINE II. 1 (fragment). Cf. C. 5. [Pl. VI-VII. 1.]

CONSTANTINOPOLIS. 2. C. 21 (one with mint-mark, $\frac{1}{\text{TRP}}$).

HELENA. 1. C. 4.

GLORIA EXERCITVS (Two soldiers). 3 (fragments).

UNCERTAIN CONSTANTINIAN. 1 (fragment: *obv.* . . . AN . . . ,
rev. RP ?).

CONSTANTIUS II. 1. C. 93 (?).

CONSTANS. 1. Cf. C. 176.

VICTORIAE DD AVGGQ NN (Two Victories). 7 (frag-
ments). [Pl. VI-VII. 2.]

FEL TEMP REPARATIO (Warrior spearing horseman).
1 (fragment). [Pl. VI-VII. 3.]

MAGNENTIUS (? "Two Victories" reverse). 1 (fragment:
? regular issue).

Total: 23.

B. IMITATIONS OF DEFINITE TYPES.

8 of CLAUDIUS II. Prototype. M. & S., V, 1, p. 233,
no. 259. (C. 47.) [Pl. VI-VII. 4.]

1 of CLAUDIUS II. Prototype. M. & S., V, 1, p. 234,
nos. 265 ff. (C. 41 ff.)

2 of VICTORINUS. Prototype. M. & S., V, 2, p. 395,
nos. 112 ff. (C. 46 ff.) (One with *obv.* . . . II ANNA . . .).
[Pl. VI-VII. 5.]

- 13 of VRBS ROMA. Cf. C. 18. (One of large size: two near normal size: of them one has on *rev.* ^{***} ALE). [Pl. VI-VII. 6.]
- 2 of VRBS ROMA. Hybrid. *Obv.* of Urbs Roma, cf. C. 18; *rev.* Victory l. (of "Constantinopolis"). C. 2.
- 25 of CONSTANTINOPOLIS. Cf. C. 21. [Pl. VI-VII. 7-9.]
- 1 of CONSTANTINOPOLIS. Cf. C. 21 (with large letters: TAE on reverse). [Pl. VI-VII. 10.]
- 5 of CONSTANTINOPOLIS. With *obv.* head, diademed (?), r.
- 1 of HELENA. Prototype. C. 4. [Pl. VI-VII. 11.]
- 1 of GLORIA EXERCITVS (Two standards).
- 20 of GLORIA EXERCITVS (One standard). [Pl. VI-VII. 12-14.]
- 3 of GLORIA EXERCITVS (One standard). *Obv.* head l. [Pl. VI-VII. 15, 16.]
- 4 of VICTORIAE DD AVGGQ NN (Two Victories).
- 2 of FEL TEMP REPARATIO (Warrior spearing fallen horseman). Overstruck on earlier regular types: one a VICTORIAE DD AVGGQ NN (Two Victories). [Pl. VI-VII. 17, 18.]
- 133 of FEL TEMP REPARATIO (Warrior spearing fallen horseman). These vary in size from normal "Æ 4" to "Minimi", in style from slight to extreme barbarism: very few have any trace of letters. [Pl. VI-VII. 19-35.]
- 1 of FEL TEMP REPARATIO (Warrior spearing fallen mount)—reversed l. to r. [Pl. VI-VII. 36.]
- 1 of FEL TEMP REPARATIO (Warrior spearing fallen horseman). A remarkable pattern-type, developed out of this reverse: overstruck (?).
- 1 of GLORIA ROMANORVM (Emperor dragging captive r.). Small and very barbarous, but it is probable that this reverse was behind it.

- 1 of SALVS REIPVBLICAE (Victory advancing l., dragging captive). Odd style: possible suggestion of over-strike. The end of the reverse legend is clearly legible. [Pl. VI-VII. 37.]

Total: 225.

C. MISCELLANEOUS.

Including (1) coins not assignable to any definite prototype, but still classifiable; (2) Uncertain coins; and (3) Uncertain fragments.

(1) FIGURE-TYPES, 10.

- 1 with *rev.* figure standing front, head r., with both arms extended and lowered, *obv.* radiate. [Pl. VI-VII. 38.]
- 1 with *rev.* figure advancing r.
- 1 with *rev.* figure advancing r. (only upper part of body visible, *obv.* bust l.).
- 2 with *rev.* figure standing r. (obverse of one, bust helmeted r., II ∞).
- 1 with *rev.* figure standing r., holding two short sceptres (?) —perhaps only part of a larger type. [Pl. VI-VII. 39.]
- 1 with *rev.* figure advancing l.
- 1 with *rev.* figure standing l. (*• in ex.: sceatta-like obverse). [Pl. VI-VII. 40.]
- 1 with *rev.* figure standing l. (dots prominent in type).
- 1 with *rev.* figure kneeling l. (only part of larger type?).

Animal-types, 7.

- 1 with *rev.* bull r., tail over back. [Pl. VI-VII. 41.]
- 1 with *rev.* stag l.
- 1 with *rev.* animal r.
- 2 with *rev.* animal l. (?).
- 1 with *rev.* eagle (or pattern derived from it).
- 1 with *rev.* bird r. [Pl. VI-VII. 42.]

Inanimate reverses, 5.

- 1 with *rev.* cross (+). [Pl. VI-VII. 43.]
- 2 with *rev.* cross (†, one with sceatta-like head).
- 1 with *rev.* cruciform pattern († or remains of figure l.?).
- 1 with *rev.* prow (the volute is quite plain). [Pl. VI-VII. 44.]

Patterns, 84.

26 with some trace of head on obverse.

7 with sceatta-like heads. [Pl. VI-VII. 45-7.]

33 with no clear trace of head.

11 with no clear trace of head (dots prominent in types)
[Pl. VI-VII. 48-50.]

7 with no clear trace of head (lines prominent in types).
[Pl. VI-VII. 51, 52.]

Traces of letters, 14.

12 show RA, SPF, TCA - CAP (?) [Pl. VI-VII. 53],
TANT (?) - PA [Pl. VI-VII. 54], CON (?) - RT (?),
XT (?) - CC (?), PII and CA, CON and TIO, VP,
AV, and traces only respectively.

1 has traces of letters in wreath.

1 has CR, with pattern of dots and lines on the other side.

Total: 120.

(2) UNCERTAIN, 810 (the exact number is uncertain, as some may be fragments only).

Uncertain radiate, 2.

Uncertain (holed), 3.

Uncertain (lead), 3.

Uncertain (blank), 1.

Total: 819.

(3) UNCERTAIN FRAGMENTS, 84 (some, at any rate, may be fragments of regular issues).

Grand total: 1221.

The coins varied in size from about 0.9 in. to 0.2 of an inch, in weight from about 57 gr. (3.69 grs.) to under 1 gr. (0.06 gr.). It must have been difficult to produce and strike coins as minute as the smallest "minimi" of this deposit, and it is probable enough that, here as at Lydney, the flans were punched out of plates or chopped off long round bars and struck with dies let in to small hammers and anvils. The most

notable feature of this deposit individually was the large number of fragments—the remains of larger coins, deliberately cut down, without any special regard to shape or to saving of original type or legend.

The metal seems in the main to be a copper of poor grade, possibly alloyed with lead. A few pieces definitely of lead were included. The flans, however produced, tend to show irregularity of edge and of thickness. The striking was often quite perfunctory, one or both impressions failing. No identities of die have been noted. There was little trace of wear.

When we turn to the types of our deposit, we are attracted at once by two salient features. The first is a long run of imitations of the "Fel. Temp. Reparatio", "Warrior spearing horseman" type, with some interesting peculiarities, when one feature of the type—the kilt and leg of the warrior, the spear-head and the body of the horse—attracts attention. The second is the series of "miscellaneous" imitations, which probably derive in many cases from "Fel. Temp. Reparatio", only too obscurely to be identified, but in others strike out into distinct designs such as beast, bird, or cross.

Occasionally, we were irresistibly reminded of the character of the Saxon Sceatta coinage. The plates will give some idea of the quality of this most interesting section of our coins.

As regards the date of the latest coins in our deposit we need only say that we can find no reason to place them any earlier than the similar coins of Lydney¹ and

¹ R. E. M. and T. V. Wheeler, *Report on the Excavations in Lydney Park*, Oxford, 1932.

Bourton-on-the-Water.² They show the same minute size, the same barbarism, the same degree of remoteness from fourth-century models. There is the same suggestion of an age of extreme poverty, in which the barest scraps and strays of metal were jealously treasured. It is precisely the sort of coinage that we must postulate for a Roman Britain, long since abandoned by the legions, slowly sinking in the scale of civilization and comfort, but still clinging to all that it could still retain of the "Felicia Tempora" for ever past.

HAROLD MATTINGLY.

W. P. D. STEBBING.

² B. H. St. J. O'Neill, "A Hoard of 'Minimissimi' from near Bourton-on-the-Water" (*Transactions of the Bristol and Gloucestershire Archaeological Society*, 1934, pp. 133 ff.).

VI.

THE PLATANA HOARD OF ASPERS OF TREBIZOND.

THROUGH the courtesy of Messrs. Spink & Son we are able to place on record part of a hoard of Aspers from John I—John II, found recently in Platana, a suburb of Trebizond. There is very little variety in the types, but this monotony is to some extent atoned for by the rich diversity of symbols that differentiate the issues. References are to Wroth, *Coins of the Vandals, &c.*, pp. 232 ff. (W.), and Retowski, *Die Münzen der Komnener von Trapezunt*, Moscow, 1910, pp. 10 ff. (R.). In each case, the general types are briefly described at the head, the special varieties are then added.¹

JOHN I, Axuchos, 1235–1238.

(Wroth, *B.M.C., Coins of the Vandals, &c.*, pp. 232–5; Retowski, *Die Munsen von Trapezunt*, pp. 11–16.)

General description as in Wroth and Retowski.

Obv. John I standing front, holding long cross and roll, crowned by the hand of God on r. IWANIC O KHN.

Rev. St. Eugenius standing front, holding cross and robe.

O AFIOC EYGENIOC.

It will be noted that the symbols—pellets, stars, and letters—usually, but not invariably, mark identity of

¹ In some cases, it is difficult to decide whether pellets belong to the types or are adjuncts in field; owing to this difficulty it is possible that some varieties appearing here as new are actually to be identified with some described by Wroth and Retowski.

die. It is not surprising, then, that our hoard should reveal a number not known to either of our two previous authorities.

An unpublished variety of *rev.* in our hoard (no. 8) defines S. Eugenius as being "of Trapezus". Cf. Retowski, p. 79 (John II).

<i>Obv.</i>	<i>Rev.</i>		
1. One pellet.	Four pellets.	W. 3.	4
All from same obverse dies.			
1a. One pellet.	— on shaft : two pellets (?)		1
2. Six pellets.	Six pellets.		1
2a. Ten pellets.	—		1
3. Star.	Four pellets.	R. 1.	1
Same <i>obv.</i> die as nos. 5, 6, 9, 17, 18. (Not as no. 1.)			
4. Pellet and Star.	—		2
Same <i>obv.</i> die as no. 5.			
5. Pellet and star.	Four pellets.		1
Same <i>obv.</i> die as no. 4, same <i>rev.</i> die as nos. 3, 6, 9, 17, 18.			
6. Two pellets and star.	Four pellets.		7
All from same <i>obv.</i> and <i>rev.</i> dies.			
Same <i>rev.</i> die as nos. 3, 5, 9, 17, 18.			
7. Three pellets and two mullets.	Three pellets.		1
7a. Five pellets.	Seven pellets.		1
8. Seven pellets.	Three pellets (two on cross).		1

Ο ΑΓΙΟC ΕΥΓΕΝΙΟC Ο ΤΤΙΖΤΟ (?)

9. Pellet and crescent.	Four pellets.	1
Same <i>rev.</i> die as nos. 3, 5, 6, 17, 18.		

<i>Obv.</i>	<i>Rev.</i>	
10. N on r. of cross.	—	1
Same <i>obv.</i> die as nos. 11, 12.		
11. N on r. of cross.	N on r. of cross. R. 18.	2
One, same <i>obv.</i> die as nos. 10, 12; the other different.		
12. N on r. of cross.	N on l. of cross.	1
Same <i>obv.</i> die as nos. 10, 11.		
13. Pellet, N on r. of cross.	Two pellets, 7 on r. of cross.	1
Same <i>rev.</i> die as nos. 14, 15.		
14. Two pellets, N on r. of cross.	Two pellets, 7 on r. of cross.	1
Same <i>rev.</i> die as nos. 13, 15.		
15. Two pellets, N on r. of cross.	Two pellets, 7 on r. of cross.	2
Same <i>rev.</i> die as nos. 13, 14.		
16. Three pellets, N on r. of cross.	Two pellets, 7 on r. of cross.	1
Same <i>obv.</i> die as no. 17.		
Same <i>rev.</i> die as nos. 13, 14, 15.		
17. Three pellets, N on r. of cross.	Four pellets.	1
Same <i>obv.</i> die as no. 16.		
Same <i>rev.</i> die as nos. 3, 5, 9, 18.		
18. Four pellets, N on r. of cross.	Four pellets.	1
Same <i>rev.</i> die as nos. 3, 5, 9, 17.		
18a. Two pellets, star.	Four pellets.	1
19. Three pellets, star, N on r. of cross.	N on r. of cross. W. 6.	1
Same <i>obv.</i> die as no. 20.		

<i>Obv.</i>	<i>Rev.</i>	
20. Three pellets, star, N on r. of cross.	Four pellets.	1
Same <i>obv.</i> die as no. 19.		

MANUEL I. 1238-1263.

(Wroth, *op. cit.*, pp. 236 ff.; Retowski, *op. cit.*, pp. 26 ff.)

General description as in Wroth and Retowski.

First type: *obv.* Manuel I, standing front, holding labarum
in r. hand, roll in l., crowned by the hand of God on r.

MNA O KHN.

Rev. St. Eugenius standing front, holding cross and robe.

O AΓΙOC EYΓENIOC

(Many minor variations of legend.)

<i>Obv.</i>	<i>Rev.</i>		
1. No mintmark.	No mintmark.	R. 187.	1
2. One pellet.	Two pellets.		1
3. One pellet.	Three pellets.	Cp. W. 37.	1
4. One pellet.	Four pellets.	W. 38.	1
5. Two pellets.	One pellet.	R. 172.	4
(Two from same <i>obv.</i> and <i>rev.</i> dies.)			
6. Two pellets.	Two pellets.	R. 175.	1
7. Three pellets.	One pellet.	R. 165. Cp. W. 44.	1
8. Three pellets.	Two pellets.	W. 45.	1
9. Three pellets.	Three pellets.	R. 169, 177a, 183.	2
Same <i>obv.</i> and <i>rev.</i> dies.			
10. Four pellets.	No mintmark.	R. 150.	3
Two from same <i>obv.</i> die.			
11. Four pellets.	Two pellets.	R. 154, 155, W. 46, 47, 50.	1
12. Four pellets.	Four pellets.	W. 49. R. 153	1
13. Five pellets.	No mintmark.	W. 51.	2
14. Five pellets.	One pellet.	W. 52.	1
15. Five pellets.	Three pellets.		1
16. Five pellets.	Six pellets.	R. 143.	2

<i>Obv.</i>	<i>Rev.</i>		
17. Five pellets.	Eight pellets.	W. 56.	1
18. Six pellets.	Four pellets.		1
19. Six (?) pellets.	Eight pellets.	Cp. W. 62.	1
20. Six (?) pellets.	Ten pellets.	R. 136.	1
21. Seven pellets.	No mintmark.	W. 68, 69, 70.	2
Same <i>obv.</i> and <i>rev.</i> dies.			
22. Seven pellets.	Four pellets.	R. 176.	2
23. Seven pellets.	Nine pellets.	R. 132.	1
24. Eight pellets.	No mintmark.		2
25. Eight pellets.	Two pellets.	R. 163. W. 71,	1
72.			
Same <i>obv.</i> die as one of no. 24.			
26. Eight pellets.	Ten pellets.		1
27. Nine pellets.	Two pellets.		1
28. Ten pellets.	Five pellets.		2
Same <i>obv.</i> die.			
29. Ten pellets.	Seven pellets.		1
30. Ten pellets.	Eight pellets.		1
31. Eleven (?) pellets.	No mintmark.		1
32. Eleven (?) pellets.	Eleven pellets.		1
33. Fourteen pellets.	No mintmark.		1
34. No mintmark.	Three pellets.		2
35. No mintmark.	Six pellets.		1
36. One mullet.	One pellet.	W. 81, 82.	1
37. One mullet.	Four pellets.		1
38. One mullet, one pellet.	Two pellets.		1
39. One mullet, one pellet.	Four pellets.	W. 84, 85.	4
Two from same <i>obv.</i> and <i>rev.</i> die.			
40. One mullet, one pellet.	Five (?) pellets.		1
41. One pellet, D.	Two (?) pellets.	W. 29.	1
42. One pellet, A.	One pellet.		1
43. Three (?) pellets, A.	One pellet.		1
44. Three pellets, A.	Eleven pellets.		1
45. Four (?) pellets, A.	Two pellets.		1

<i>Obv.</i>	<i>Rev.</i>	
46. Five pellets, A(?).	Eight pellets.	1
47. Two pellets, B.	Four pellets.	1
48. Eight pellets, B.	B.	1
49. Eight pellets, B.	Four pellets, B.	1
50. Two pellets, K.	Five pellets.	2
51. One pellet, K.	K.	1
52. One pellet, 2 (? K).	Two pellets. W. 17(?)	1
53. One pellet, K.	Four pellets.	2
54. Two pellets, K.	Three pellets. R. 38.	1
55. Nine pellets, K.	One pellet, K.	1
56. One star.	One star, T (?).	1
57. Onestar (on cross), No mintmark.	R. 99. W. 77, 78.	5
one pellet.		
Two from same <i>obv.</i> die and (?) <i>rev.</i> dies.		
58. Onestar (on cross), No mintmark.		4
two pellets.		
59. Onestar (on cross), One pellet.		2
two pellets.		
Same <i>obv.</i> dies.		
60. Onestar (on cross), Two pellets.		1
two pellets.		
61. One star, four pellets.	Four pellets.	1
pellets.		
62. Three stars.	Two stars.	1
63. Three stars, one pellet.	Three stars, two pellets.	1
64. Four stars.	Three stars, one pellet.	1
65. Four stars, two pellets.	Three stars. W. 91.	1
66. ✕ on cross, six pellets.	Two pellets.	2
Same <i>obv.</i> dies.		
67. †	†	2
Same <i>obv.</i> dies.		

Second type: Wroth, pp. 245 ff.; Retowski, pp. 66 ff.).

Obv. Manuel I standing front, holding labarum with short shaft in r. hand and cross on globe in l., crowned by the hand of God on r. ΜΝΑ Ο ΚΗΝ (and many variants).

Rev. S. Eugenius standing front, holding cross and globe.

(A) ΕΥΓΕΝΙΟC ΟΥΑΤΤ (and variants).

Obv.

Rev.

1. No mintmarks.	No mintmarks.	Cp. W. 98.	9
2. Two pellets.	No mintmark.	W. 96.	4
Same <i>obv.</i> and <i>rev.</i> dies.			
3. One star, three(?) pellets.	No mintmark.		1

JOHN II. 1280-1297.

(Wroth, *B.M.C.*, pp. 259 ff.; Retowski, pp. 76 ff.)

General description:

Obv.: John II standing front, holding labarum with short shaft in r. hand and cross on globe in l., crowned by the hand of God r. ΙΩΟ Κ ΗΝ ΝΟ (and variants).

Rev. S. Eugenius standing front, holding long cross in r. hand and robe in l. (A) ΕΥΓΕΝΙΟC (and variants).

Obv.

Rev.

1. No mintmarks.	No mintmarks.	R. 72 ff.	29
		W. 7 ff, 77 ff.	
2. One pellet.	No mintmark.		3
3. Two (?) pellets.	No mintmark.		1
4. No mintmark.	One pellet.	R. 42 a.	1
5. No mintmark.	Two pellets on staff (—).		10
6. No mintmark.	Three pellets.		3
7. No mintmark.	Four pellets.	R. 25 ff.	18
		W. 1 ff.	
8. No mintmark.	Eight pellets.		1
9. No mintmark.	One star.		9
10. No mintmark.	✠		14 ²

² All one reverse die: 10 with one obverse, 2 each with two other obverses.

11. Fleur-de-lis.	No mintmark.	R. 55, 56. W. 21.	6
Four from same <i>obv.</i> and <i>rev.</i> dies.			
12. Fleur-de-lis, one pellet.	No mintmark.		2
13. Fleur-de-lis.	B	W. 17, 18.	2
14. B.	β, one pellet on shaft.	R. 48.	1
Same <i>rev.</i> die as no. 15.			
15. No mintmark.	B, one pellet on shaft.	R. 50.	1
Same <i>obv.</i> die as no. 14.			
16. No mintmark.	γ		2
17. No mintmark.	Ϸ, one pellet.		1

THEODORA, c. 1285.

(Wroth, *B.M.C.*, p. 277; Retowski, pp. 132 ff.)

General description:

Obv. Theodora standing front, holding cross on globe in r. hand, l. hand on breast, crowned by the hand of

God r. Θ ΕΩΥΡΑ Η ΚΟΙΝΗΝ

Rev. S. Eugenius standing front, holding long cross in r. hand, l. in robe. Ο ΑΓΙΟC ΕΥΓΕΝΙΟC

Obv. and *rev.* no mintmarks. 25

There are four obverse and six reverse dies represented as shown below.

18 from *obv.* A, *rev.* A.

1	„	A,	„	B.
3	„	B,	„	C.
1	„	C,	„	D.
1	„	C,	„	E.
1	„	D,	„	F.

HAROLD MATTINGLY.

VII.

SHAPWICK III: A LARGE HOARD OF VALENTINIANIAN AES.

THE peat-beds of Shapwick Moor which had already given us the two silver hoards "Shapwick I" and "II" (described in *Num. Chron.*, 1936, pp. 245 ff. and 1938, pp. 53 ff.) have now yielded up a third hoard—this time, of bronze. The coins, numbering over 1,100, were contained in a canister-shaped pewter vessel, measuring $8\frac{3}{8}$ inches in height and $3\frac{1}{8}$ in diameter.

Their finder was the same Mr. P. S. Mullins, of Meare, to whom we owe the discovery of Shapwick II. Shapwick II, it may be remembered, contained no coin of Honorius, but came close up to his accession with a post-Maximus coin of Theodosius I. The new hoard, Shapwick III, found 10 ft. away, has a VOTVMVLTX of Maximus as its latest coin. But Shapwick I, found only 6 ft. from Shapwick II, carries us down well into the reign of Honorius.

Shapwick III is notable for the generally good preservation of even the earlier coins, for the total absence of $\text{Æ}2$ and, especially, for its predominantly "Valentinianian" character. So far as I know, no similar large "Valentinianian" hoard has been recorded among British finds, though we have detailed records of such from the "Danubian" sites of Arpas, Jabing, Öcsöd, and Veszprém.

For the last nine or ten years of Valentinian I's reign his $\text{Æ}3$ coinage consists entirely (with the ex-

ception of a special type struck for Gratian at Arelate) of a dreary succession of issues of **GLORIA ROMANORVM** "Emperor dragging captive and holding *labarum*" and **SECVRITAS REIPVBLICAE** "Victory advancing l." Fortunately, each issue was signed with a distinguishing mintmark, and herein lies our sole chance of following the course of the coinage and arriving at an approximate dating of its various stages. Detailed description, therefore, unnecessary for the earlier part of the hoard, has been given to the coinage of Valentinian.

The hoard contained the following coins:

RADIATE. 4, all much worn and none very small or barbarous.

CONSTANTINIAN. 27. Only two are earlier than A.D. 330. The $\text{Æ}3$ and $\text{Æ}4$ denominations are represented in about equal numbers. The coins are little worn.

CONSTANTIAN. 125 (including one of Jovian). These consist mainly of **GLORIA EXERCITVS**, "one standard" type (Constantius II, 9; Constans, 8): **VICTORIAE DD AVGG Q NN** (Constantius II, 15; Constans, 44), **FEL TEMP REPARATIO**, "Soldier spearing fallen horseman" type (Constantius II, $\text{Æ}3$, 24, of which five are barbarous and include four overstrikes of Constantinian or earlier Constantian types; $\text{Æ}3$ small, 1, barbarous; $\text{Æ}4$, 4, all barbarous. One of the legitimate $\text{Æ}3$ is cut down to $\text{Æ}4$ size and two are broken irregularly. Julian (Caesar), $\text{Æ}3$, 3, of which one is cut down to $\text{Æ}4$ size). Of Magnentius and Decentius there are $\text{Æ}3$, 2; $\text{Æ}4$, 2, barbarous. Most of the coins show little sign of wear.

VALENTINIANIAN. 945. The invariable obverse of Valentinian I is **DN VALENTINI-ANVS P F AVG**; of Valens, from western mints, **DN VALEN-S P F AVG**; that of Gratian varies. All have bust pearl-diademed, draped, and cuirassed r.


POST-VALENTINIAN I. 20.



In the reverse type of **GLORIA ROMANORVM** the captive is regularly represented kneeling on one knee, but on coins of Antioch (not occurring in this hoard) and on an important group of coins of Arelate he is represented walking. I have listed the "walking" variety separately below under the mint of Arelate. It occurs otherwise only on a single coin of Lugdunum among the coins of this hoard from western mints. In the same type the position of the emperor's right arm and of the shaft of the labarum which he holds in his left hand often varies in relation to the **OF** I (II, III) or other letters found in the field of some issues from Lugdunum and Arelate. Dotted lines to left and right of the centre are used below to show the position of arm and shaft respectively.

The mints represented in this hoard are as follows:





TREVERI. 9.

GLORIA RO-MANORVM. Normal type. VALENTINIAN I. 2. TRP., TRS*.

GLORIA RO-MANORVM. "Victory advancing l."—
a type found only from this mint. VALENS. 1.  TRP.

SECVRITAS-REIPVBLICAE VALENS. 5. TRP,
TRS, TRS* (2),  GRATIAN. (*Obv.* DN GRATIA-
NVS PF AVG). 1.  TRP.

LUGDUNUM. 206.

GLORIA RO-MANORVM. VALENTINIAN I. 80.
 SLVG (2),  LVG,  LVGS (3),  LVGS (2),

$\frac{O}{LVG} \frac{F}{S} \frac{II}{\cdot}$ (5; captive walking, l.), $\frac{O}{LVGS} \frac{F}{\cdot} \frac{II}{\text{☿}}$ (4), $\frac{O}{LVGS} \frac{F}{\text{☿}} \frac{II}{\cdot}$ (2),

$\frac{O}{LVGS} \frac{F}{\cdot} \frac{II}{\text{☿}}$ (2), $\frac{O}{LVGS} \frac{F}{\text{☿}} \frac{II}{\cdot}$ (2), $\frac{O}{LVGS} \frac{F}{\text{☿}} \frac{II}{\cdot}$ (6), $\frac{O}{LVGS} \frac{F}{\text{☿}} \frac{II}{\cdot}$,

$\frac{O}{LVGS} \frac{F}{S} \frac{II}{\cdot}$ (1, and ? dot, 2), $\frac{O}{LVGS} \frac{F}{S} \frac{II}{\cdot}$, $\frac{O}{LVGS} \frac{F}{R} \frac{II}{E}$, $\frac{O}{LVGS} \frac{F}{R} \frac{II}{S}$ (2),

$\frac{O}{LVGS} \frac{F}{P} \frac{II}{\cdot}$ (1, and ? 4), $\frac{O}{LVGS} \frac{F}{A} \frac{II}{\cdot}$ (6), $\frac{O}{LVGS} \frac{F}{D} \frac{II}{\cdot}$ (19),

$\frac{O}{LVGS} \frac{F}{\cdot} \frac{II}{\cdot}$ (1, and ? 1), $\frac{O}{\text{☿}}$ (10). VALENS. 4.

$\frac{O}{LVGS} \frac{F}{S}$, $\frac{O}{LVGS} \frac{F}{S}$ (3). GRATIAN. 29. (Obv. DN

GRATIAN-VS AVGG AVG) $\frac{R}{LVGS} \frac{S}{\cdot}$, $\frac{R}{[LVGS]} \frac{S}{\cdot}$,

$\frac{O}{LVGS} \frac{F}{R} \frac{II}{S}$ (5), $\frac{O}{LVGS} \frac{F}{\cdot} \frac{II}{\text{☿}}$ (2), $\frac{O}{LVGS} \frac{F}{\text{☿}} \frac{II}{\cdot}$, $\frac{O}{LVGS} \frac{F}{\text{☿}} \frac{II}{\cdot}$ (4),

$\frac{O}{LVGS} \frac{F}{\text{☿}} \frac{II}{\cdot}$ (6), $\frac{O}{LVGS} \frac{F}{S} \frac{II}{\cdot}$ (1, and ? dot, 2), $\frac{O}{\text{☿}}$,

$\frac{O}{LVGS} \frac{F}{R} \frac{II}{E}$, $\frac{O}{\text{☿}}$ (2). (Obv. DN GRATIANVS PF

AVG) $\frac{R}{LVGS} \frac{S}{\cdot}$, $\frac{\cdot}{LVGS}$ (small barbarous).

S | ☺

SECVRITAS-REIPVBLICAE. VALENS. 71. $\frac{S}{LVGP}$,

$\frac{S}{LVGP}$ (2), $\frac{R}{LVGS*}$, $\frac{R}{LVGP}$ (2), $\frac{S}{LVGP}$, $\frac{R}{LVGSA}$,

$\frac{OF}{S|R}$, $\frac{OF}{S|R}$ (2), $\frac{OF}{S|R}$ (5), $\frac{OF}{S|R}$, $\frac{OF}{S|R}$ (5),

and ? dot, 3), $\frac{OF}{S|R}$, $\frac{OF}{S|R}$ (12), $\frac{OF}{S|R}$ (2),

$\frac{OF}{S|R}$ (5), $\frac{OF}{S|R}$ (4), $\frac{OF}{S|R}$, $\frac{OF}{S|R}$ (6),

$\frac{OF}{S|R}$ (9), $\frac{C}{LVGP}$ (2), $\frac{C}{LVGP}$, $\frac{OF}{S|R}$ (3). GRATIAN.

21. (*Obv.* DN GRATIAN-VS AVGG AVG)

$\frac{OF}{S|R}$ (6), $\frac{OF}{S|R}$ (2), $\frac{OF}{S|R}$, $\frac{OF}{S|R}$, $\frac{OF}{S|R}$,

$\frac{OF}{S|R}$, $\frac{OF}{S|R}$ (5), $\frac{OF}{S|R}$, $\frac{OF}{S|R}$ (3). ? Emperor

S | ☺

$\frac{S}{LVGP}$.

ARELATE. 455.

RESTITV-TOR REIP. VALENS. $\frac{R}{TCONST}$.

GLORIA RO-MANORVM. (a) Captive walking.

VALENTINIAN I. 11. $\frac{P}{PCON}$, $\frac{S}{SCON}$ (5, and ? 3),

$\frac{N}{SCON}$, $\frac{N}{SCON}$. VALENS. 24. $\frac{P}{TCON}$, $\frac{S}{SCON}$,

$\frac{|}{PCON}$ (8), $\frac{|}{SCON}$ (9), $\frac{|}{TCON}$, $\frac{|}{\text{hatched} CON}$ (2), $\frac{|}{PCON} N$ (1,
 and ? 1). (b) Captive kneeling. VALENTINIAN I. 33.

$\frac{OF}{CONST}$, $\frac{OF}{CONST}$, $\frac{OF}{CONST}$ (7), $\frac{OF}{CON}$ (3),

$\frac{OF}{CON}$, $\frac{|}{CON}$ (2), $\frac{|}{PCON}$, $\frac{|}{TCON}$, $\frac{|}{\text{hatched} CON}$,

$\frac{OF}{CON}$, $\frac{OF}{CON}$, $\frac{OF}{CON*}$, $\frac{OF}{CON*}$, $\frac{OF}{CON*}$,

$\frac{OF}{CON*}$ (2), $\frac{OF}{CON*}$ (4), $\frac{OF}{CON*}$, $\frac{OF}{CON*}$.

? mint-marks (2). VALENS. 29. $\frac{OF}{CONST}$, $\frac{OF}{CONST}$ (2),

$\frac{OF}{CON}$, $\frac{OF}{CON}$, $\frac{OF}{CON}$, $\frac{OF}{CON}$, $\frac{|}{PCON}$ (3),

$\frac{|}{SCON}$ (2), $\frac{|}{\text{hatched} CON}$, $\frac{OF}{CON}$, $\frac{OF}{CON}$, $\frac{OF}{CON*}$,

$\frac{OF}{CON*}$ (2), $\frac{OF}{CON*}$, $\frac{OF}{CON*}$ (2), $\frac{OF}{CON*}$,

$\frac{E|C}{PCON}$, $\frac{E|C}{\text{hatched} CON}$. ? mints-marks, 5. GRATIAN. 1.

(Obv. DN GRATIA-NVS PF AVG) $\frac{|}{TCON}$. VALENTI-

NIAN II. 1. (Obv. DN VALENTINIANVS PF AVG)

$\frac{V|A}{TCON}$.

SECVRITAS-REIPVBLICAE. (The ligature \mathfrak{E} of the final letters, very rare at other mints, is very common at Arelate. Such instances are marked below by L, and are additional to the numbers not so marked.) VALENTINIAN I.

78. $\frac{\text{OF} | \text{I}}{\text{CONST}}$, $\frac{\text{OF} | \text{II}}{\text{CONST}}$, $\frac{\text{OF} | \text{III}}{\text{CONST}}$ (L. 4), $\frac{\text{OF} | \text{I}}{\text{CON}}$ (2),

$\frac{\text{OF} | \text{II}}{\text{CON}}$ (1, L. 1), $\frac{\text{OF} | \text{III}}{\text{CON}}$ (L. 1 and ?L. 1), $\frac{\cdot |}{\text{PCON}}$ (12,

L. 2 and ?L. 1), $\frac{|}{\text{PCON}}$ (18, L. 3), $\frac{|}{\text{SCON}}$ (7, L. 2),

$\frac{|}{\text{TCON}}$, $\frac{|}{\text{CON}}$ (2), $\frac{\text{N} |}{\text{SCON}}$ (4), $\frac{\text{OF} | \text{I}}{\text{CON}}$ (L. 1), $\frac{\text{OF} | \text{II}}{\text{CON}}$,

$\frac{\text{OF} | \text{III}}{\text{CON}}$ (L. 2), $\frac{\text{OF} | \text{I}}{\text{CON}^*}$ (L. 4), $\frac{\text{OF} | \text{II}}{\text{CON}^*}$ (L. 2), $\frac{\text{OF} | \text{III}}{\text{CON}^*}$ (L. 4).

VALENS. 132. $\frac{\text{OF} | \text{I}}{\text{CONST}}$, $\frac{\text{OF} | \text{III}}{\text{CONST}}$ (L. 1), $\frac{\text{OF} | \text{I}}{\text{CON}}$ (1, L. 4),

$\frac{\text{OF} | \text{II}}{\text{CON}}$ (1, L. 3), $\frac{\text{OF} | \text{III}}{\text{CON}}$ (L. 2), $\frac{\text{OF} | \text{III}}{\text{CON}}$ (?L. 1),

$\frac{\cdot |}{\text{PCON}}$ (3), $\frac{\cdot |}{\text{SCON}}$ (3, L. 3), $\frac{\cdot |}{\text{CON}}$ (6, L. 1), $\frac{|}{\text{PCON}}$

(18, L. 6, ?L. 1), $\frac{|}{\text{SCON}}$ (10, L. 13, ?L. 3), $\frac{|}{\text{TCON}}$ (9,

L. 3, ?L. 1), $\frac{|}{\text{CON}}$ (4, L. 1), $\frac{\text{N} |}{\text{PCON}}$ (L. 5), $\frac{\text{N} |}{\text{CON}}$

(L. 2), $\frac{\text{OF} | \text{I}}{\text{CON}}$ (2, L. 1), $\frac{\text{OF} | \text{II}}{\text{CON}}$ (5), $\frac{\text{OF} | \text{III}}{\text{CON}}$ (L. 2),

$\frac{\text{OF} | \text{III}}{\text{CON}}$ (?L. 1), $\frac{\text{OF} | \text{I}}{\text{CON}}$ (L. 5), $\frac{\text{OF} | \text{II}}{\text{CON}^*}$ (2, L. 2),

$\frac{\text{OF} | \text{III}}{\text{CON}^*}$ (L. 2), $\frac{\text{OF} | \text{II}}{\text{CON}^*}$, $\frac{\text{E} | \text{C}}{\text{SCON}}$ (1, L. 1), $\frac{\text{V} | \text{A}}{\text{SCON}}$ (1).

GRATIAN. 28. (*Obv.* DN GRATIA-NVS PF AVG)

$\frac{|}{PCON}$ (3, L. 2), $\frac{|}{SCON}$ (7, L. 3), $\frac{|}{TCON}$ (6, L. 1),
 $\frac{|}{CON}$ (L. 1), $\frac{E|C}{SCON}$ (L. 1), $\frac{E|C}{CON}$ (L. 1), $\frac{V|A}{PCON}$,
 $\frac{V|A}{SCON}$ (1, L. 1).

GLORIA NO-VI SAECVLI. "Emperor standing facing, head l., holding *labarum* and resting l. hand on shield"—a type found only from this mint. GRATIAN. 117.

(Obv. DN GRATIANVS AVGG AVG) $\frac{|}{TCON}$ (68),
 $\frac{\cdot|}{TCON}$ (18), $\frac{N|}{TCON}$ (5), $\frac{OF|I}{CON}$, $\frac{OF|III}{CON}$, $\frac{OF|I}{CON*}$ (6),
 $\frac{OF|II}{CON*}$ (2), $\frac{OF|III}{CON*}$ (9), $\frac{OF|I}{CON}$ (3), $\frac{OF|II}{CON}$ (2),
 $\frac{OF|III}{CON}$ (2).

ROME. 59.

GLORIARO-MANORVM. VALENS. 1. SM ϕ RP. GRATIAN. 2. SM ϕ RQ, R-PRIMA.

SECVRITAS-REIPVBLICAE. VALENTINIAN I. 11. SM ϕ RP, SM ϕ RB (3), SM ϕ RQ, R-QVARTA (2), (with dot uncertain) RPRIMA, RSECVNDA, RQVARTA (2). VALENS. 36. SMRB, SM ϕ RP (2), SM ϕ RB, SM ϕ RT (4), SM ϕ RQ (3), SM ϕ R $\frac{||||}{}$, R-PRIMA (3), RPRIMA, R-SECVNDA (3), R-TERTIA, RTERTIA (3), R-QVARTA (5), (with dot uncertain) RPRIMA, RSECVNDA (4), RTERTIA (2), RQVARTA. GRATIAN. 9. (Obv. DN GRATIA-NVS PF AVG) SM ϕ RQ (3, and ? 3), RPRIMA, R-SECVNDA, RSECVNDA.

AQUILEIA. 117.

GLORIA RO-MANORVM. VALENTINIAN I. 28.

$\frac{|f}{SMAQS}$, $\frac{|*}{SMAQP}$, $\frac{|*}{SMAQS}$ (2), $\frac{|R}{SMAQP}$, $\frac{|R}{SMAQS}$,

$\frac{| \text{R} }{\text{SMAQ} \text{///}}$ (2), $\frac{| \text{Y} }{\text{SMAQP}}$, $\frac{| }{\text{SMAQP}}$ (4), $\frac{| }{\text{SMAQS}}$ (3),
 $\frac{| }{\text{SMAQ} \text{///}}$, $\frac{| }{\cdot \text{SMAQP}}$ (2), $\frac{| }{\cdot \text{SMAQS}}$ (5), $\frac{| * }{\text{SMAQP}}$ (2),
 $\frac{| * }{\text{SMAQS}}$ (2). VALENS. 25. $\frac{| \text{A} }{\text{SMAQP}}$ (2), $\frac{| \text{A} }{\text{SMAQS}}$ (2),
 $\frac{| \text{A} }{\text{SMAQ} \text{///}}$, $\frac{| \text{B} }{\text{SMAQP}}$, $\frac{| \text{P} }{\text{SMAQP}}$, $\frac{| \text{P} }{\text{SMAQS}}$, $\frac{| \text{C} }{\text{SMAQP}}$,
 $\frac{| }{\text{SMAQP}}$, $\frac{| \text{Y} }{\text{SMAQ} \text{///}}$, $\frac{| }{\text{SMAQP}}$ (6), $\frac{| }{\text{SMAQ} \text{///}}$,
 $\frac{| }{\cdot \text{SMAQP}}$ (4), $\frac{| }{\cdot \text{SMAQS}}$ (3). GRATIAN. 3. (*Obv.* DN
 GRATIA - NVS PF AVG) $\frac{| }{\cdot \text{SMAQP}}$, $\frac{| }{\cdot \text{SMAQS}}$ (2).

SECVRITAS - REIPVBLICAE. VALENTINIAN I. 23.
 $\frac{\text{B} | }{\text{SMAQS}}$, $\frac{\text{E} | }{\text{SMAQ} \text{///}}$, $\frac{\text{P} | }{\text{SMAQP}}$, $\frac{\text{P} | }{\text{SMAQ} \text{///}}$, $\frac{\text{C} | }{\text{SMAQS}}$,
 $\frac{\text{R} | }{\text{SMAQP}}$, $\frac{\text{R} | }{\text{SMAQS}}$ (2), $\frac{\text{R} | }{\text{SMAQ} \text{///}}$, $\frac{| }{\text{SMAQP}}$ (2),
 $\frac{| }{\text{SMAQS}}$ (4), $\frac{| }{\text{SMAQ} \text{///}}$, $\frac{| }{\cdot \text{SMAQP}}$ (2), $\frac{| }{\cdot \text{SMAQS}}$ (3),
 $\frac{| * }{\text{SMAQP}}$, $\frac{| * }{\text{SMAQS}}$. VALENS. 36. $\frac{\text{A} | }{\text{SMAQS}}$ (2),
 $\frac{\text{A} | }{\text{SMAQ} \text{///}}$ (3), $\frac{\text{B} | }{\text{SMAQP}}$ (3), $\frac{\text{B} | }{\text{SMAQS}}$, $\frac{\text{B} | }{\text{SMAQ} \text{///}}$,
 $\frac{\text{P} | }{\text{SMAQP}}$, $\frac{\text{C} | }{\text{SMAQP}}$, $\frac{| * }{\text{SMAQS}}$, $\frac{\text{R} | }{\text{SMAQP}}$, $\frac{\text{R} | }{\text{SMAQS}}$ (2),
 $\frac{\text{R} | }{\text{SMAQ} \text{///}}$ (2), $\frac{\text{Y} | }{\text{SMAQS}}$, $\frac{| }{\text{SMAQP}}$ (3, L. 1), $\frac{| }{\text{SMAQS}}$ (4),
 $\frac{| }{\text{SMAQ} \text{///}}$, $\frac{| }{\cdot \text{SMAQP}}$, $\frac{| }{\cdot \text{SMAQS}}$ (3), $\frac{| }{\cdot \text{SMAQ} \text{///}}$,

$\frac{*}{\text{SMAQP}}$, $\frac{*}{\text{SMAQ}} \text{///}$ (2). GRATIAN. 2. (*Obv.* DN
 GRATIA-NVS PF AVG) $\frac{|}{\text{SMAQP}}$, $\frac{|}{\text{SMAQS}}$.

SISCIA. 59.

GLORIA RO-MANORVM. VALENTINIAN I. 10.

$\frac{\text{M}}{\text{BSISC}}$, $\frac{\text{F}}{\text{BSISC}}$, $\frac{\text{F}}{\text{BSISC}}$, $\frac{\text{F}}{\text{BSISC}}$, $\frac{\text{F}}{\text{BSISC}}$ (2),
 $\frac{\text{F}}{\text{BSISC}}$, $\frac{\text{F}}{\text{BSISC}}$, $\frac{\text{F}}{\text{BSISC}}$, $\frac{\text{F}}{\text{BSISC}}$. VALENS. 1.
 $\frac{|}{\text{ASISC}}$. GRATIAN. 14. (*Obv.* DN GRATIANVS PF AVG)

$\frac{\text{F}}{\Delta\text{SISC}}$, $\frac{\text{F}}{\Delta\text{SISC}}$ (7), $\frac{\text{F}}{\Delta\text{SISC}}$, $\frac{\text{F}}{\Delta\text{SISC}}$ (5).

SECVRITAS-REIPVBLICAE. VALENTINIAN I. 14.

$\frac{|}{\text{ASISC}}$, $\frac{*}{\text{FSISC}}$, $\frac{*}{\text{FSISC}}$, $\frac{\text{C}}{\text{FSISC}}$, $\frac{\text{R}}{\text{FSISC}}$,
 $\frac{\text{R}}{\text{FSISC}}$, $\frac{\text{R}}{\text{FSISC}}$ (3), $\frac{\text{R}}{\text{FSISC}}$ (3), $\frac{\text{R}}{\text{FSISC}}$ (2),
 $\frac{\text{R}}{\text{FSISC}}$. VALENS. 20. $\frac{\text{D}}{\text{ASISC}}$, $\frac{*}{\text{ASISC}}$, $\frac{*}{\text{ASISC}}$,
 $\frac{\text{A}}{\text{ASISC}}$, $\frac{\text{A}}{\text{ASISC}}$, $\frac{\text{R}}{\text{ASISC}}$, $\frac{\text{R}}{\text{ASISC}}$, $\frac{\text{R}}{\text{ASISC}}$ (3),
 $\frac{\text{R}}{\text{ASISC}}$, $\frac{\text{R}}{\text{ASISC}}$ (4), $\frac{\text{R}}{\text{ASISC}}$ (5).

THESSALONICA.

GLORIA RO-MANORVM. VALENS. 1. $\frac{|}{TESA}$.

CONSTANTINOPLE.

SECVRITAS-REIPVBLICAE. VALENS. 1. (*Obv.*
DN VALENS-PF AVG) $\frac{+|+}{CONSA}$.

? HERACLEA.

SECVRITAS-REIPVBLICAE. VALENS. 1. (*Obv.*
DN VALENS-PF AVG) $\frac{\bullet|}{SMHA}$.

ALEXANDRIA.

SECVRITAS-REIPVBLICAE. VALENTINIAN I. 1.
 $\frac{|}{ALEI}$ (clipped to Æ 4 size or struck on an Æ 4 flan).

Unattributable to mints are 6 GLORIA RO-MANORVM (Valentinian I, 3, Valens, 3) and 28 SECVRITAS-REIPVBLICAE (Valentinian I, 6, Valens, 22). There is one brockage of Valens.

The following mintmarks of Valens' *Securitas* type had not previously been seen by me: $\frac{|}{LVGSA}$, $\frac{OF|II}{*CON}$,

and $\frac{*|Q}{K|}$ (by the side of the common $\frac{*|Q}{K|}$),
 $\frac{ASISCR}{ASISCR}$.

$\frac{|}{LVGS*}$, read by me doubtfully on a coin from Corstopitum, is confirmed by the present hoard.

After Valentinian I. 20.

TREVERI. 1.

MAGNUS MAXIMUS. 1. Æ4 (14 mm.) VOT | V |
 MVLT | X in wreath. Mintmark $\frac{|}{\text{SMTR}}$.

LUGDUNUM. 16.

GRATIAN. 15. Æ4 (14-15 mm.). VOT | XV |
 MVLT | XX in wreath. Mintmarks $\frac{|}{\text{LVGP}}$ (7), $\frac{|}{\text{LVGS}}$ (6),
 two of which have S in the circle at the top of the wreath),
 $\frac{|}{\text{LVG}}$ (2).

THEODOSIUS. 1. Æ3 CONCOR - DIA AVGGG.
 Mintmark $\frac{|}{\text{LVGP}}$.

ARELATE. 3.

GRATIAN. 1. Æ3 VIRTVS RO - MANORVM. Mint-
 mark $\frac{|}{\text{PCON}}$. THEODOSIUS I. 2. CONCOR - DIA
 AVGGG. Mintmark $\frac{|}{\text{TCON}}$ (2).

The total number of coins listed above is 1,111.

Although, as I have said above, I know of no other large "Valentinianian" hoard recorded as found in Britain, there can yet be little doubt that the 1,296 coins of that period which I noted in Lord Bledisloe's cabinet at Lydney Park also originally formed a hoard, though not so recorded. Their numbers contrast strongly with the mere handful of the "Theodosian" coinage in his trays, and some devastating catastrophe seems to divide the two periods in the settlement at Lydney. Comparing the composition of the Valen-

tinianian coins at Lydney (many were undecipherable) and Shapwick, we get the following interesting result:

	Treveri	Lugdunum	Arelate	Rome	Aquileia	Siscia
Lydney	7	200	461	36	86	54
Shapwick III	9	206	455	59	118	59

There is certainly a striking similarity in the mint-representation in each group, and we may well imagine that each owed its burial to a common danger. The Bristol Channel and the Severn offered a tempting highway to Irish raiders, and the numerous silver hoards found in their neighbourhood from East Harptree of c. A.D. 376 to North Mendip and others of the late fourth or early fifth century witness to a state of continual alarm. It seems reasonable to believe that the Lydney and Shapwick hoards owed their burial to the same cause. What coins, if any, later than Valentinian I were found with the presumed Lydney hoard, we cannot, of course, now say, but among Lord Bledisloe's coins there is just that slight representation of the 375-388 coinage that we find in the present hoard.

The distribution of mints both in the British and in the Danubian hoards is much as we might expect. In the former the Gallic mints are overwhelmingly predominant, but, of these, only Lugdunum and Arelate. The issues from Treveri, though fairly numerous, as shown by the variety of mintmarks (many of which are not represented in our hoard), must have been very small. So when Dr. Barb, commenting on the absence of Treveran coins at Jabing, infers that this is an indication of dwindling trade on the Rhine-Danube route, we feel that what is likely enough to be a fact

is hardly proved by the absence of bronze coinage from a mint which was almost entirely occupied with striking gold and silver. Indeed, the proportion of Treveran Æ to that of Lugdunum and Arelate in the British hoards is actually less than in the "Danubian".

In the latter hoards the bulk of the coinage is, of course, Siscian; Öcsod alone of the four lies outside the boundaries of the old Roman Empire. Barb calls attention to the great discrepancy between the numbers of Siscian coins from Jabing, where Roman state employees would naturally receive their payment in coinage of the local mint, and from Öcsod, which would receive such coinage only as filtered in by way of trade. This suggested explanation of the discrepancy is acute and interesting, but the discrepancy itself seems to be exaggerated. Jabing, it is true, has more than two-thirds of its total (1,166) made up of Siscian coinage, but the "not even a quarter" allowed to Öcsod must be a mistake, as its total of 1,317 contains 534 Siscian coins for the Valentinianian period alone.

In connexion with the mint of Siscia we are faced with a problem of our own, of which I at least can offer no convincing solution. In itself it seems strange that a Pannonian mint should always be represented as strongly as it is among British-found coins of the time of Valentinian I, whether in hoards or scattered, but it is much more strange that the two mintmarks

$\begin{array}{|c|} \hline \text{F} \\ \hline \end{array} \begin{array}{|c|} \hline \text{R} \\ \hline \end{array}$ and $\begin{array}{|c|} \hline \text{F} \\ \hline \end{array} \begin{array}{|c|} \hline \text{R} \\ \hline \end{array}$, which occur on less than 2 per cent.

of the Siscian coins in Danubian hoards, should occur on 80 per cent. of those found at Lydney and Shapwick. About two-thirds of the Siscian site-finds of this period at Richborough also bear these two mint-

marks. They must be dated towards the end of Valentinian I's reign, and, as they show little sign of wear, would seem to have been shipped across to Britain as soon as struck, perhaps accompanying a new draft of Pannonian soldiers detailed for service in Britain, and issued for the special purpose of their payment. Must not their occurrence in such large numbers at Lydney and Shapwick point to the employment of Pannonian troops in the neighbourhood of the Bristol Channel as a check on the raiders? Our hoard, from the little-worn state of the Valentinianian, and the total absence of the $\text{Æ}4$ Theodosian, coinage, can hardly be dated later than about A.D. 388. Presumably, by then the protecting garrison had been withdrawn; hence the burial of the hoard.

J. W. E. PEARCE.

ERRATUM.

Num. Chron., 1938, page 246, l. 10, for XXII read XX."

J. W. E. P.

VIII.

A NEW GOLD MEDALLION OF CONSTANTIUS II.

THROUGH the kindness of Frl. Dr. Hagen of the
Rheinisches Landesmuseum, Bonn, I am able to

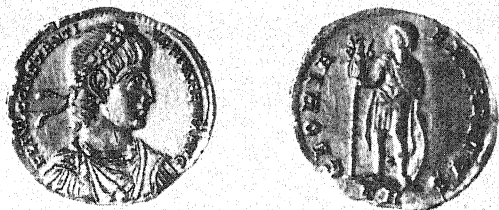


FIG. 1.

publish here a new gold medallion of Constantius II,
found in 1935 near Kessel, in the Cleves district, during
operations for regulating the course of the river Niers,
and recently acquired by the Bonn Museum.

Obv. FL IVL CONSTANTI—VS PIVS FELIX AVG
Bust of Constantius II, diademed, to right, seen three-
quarters to front and wearing paludamentum and
cuirass. Border of dots.

Rev. GLORIA EXERCITVS (around) T R (exergue). The
Emperor, bareheaded and wearing military dress,
standing to left; he holds a trophy in his right hand
and with his left hand grasps the rim of a large oval
shield resting on the ground at his side. Border of
dots.

Av. 1.15 (27 mm.); wt. 103.7 (6.721 gm.); $\uparrow\downarrow$; = $1\frac{1}{2}$ -solidi.¹
[Fig. 1.]

¹ *Bonner Jahrbücher* 142, 1937, p. 202; 143, 1938, p. 292, Taf.
56, 18.

No specimens of such a medallion of Constantius II were known either to Cohen or to Gnecci, and our piece appears to be unique. The reverse type is, however, identical with that of two previously known unique $1\frac{1}{2}$ -*solidi* pieces of Constans and Constantinus II respectively, the former in the Münzkabinett of the



FIG. 2.

Kaiser-Friedrich Museum, Berlin, the latter in the Bundessammlung of Vienna. The Berlin medallion of Constans, likewise unknown to Cohen and Gnecci, was also struck at Trier and is exactly similar in style to the Bonn piece.²

Obv. FL IVL CONSTANS PIVS FELIX AVG Bust of Constans, diademed, to right, seen three-quarters to front and wearing paludamentum and cuirass. Border of dots.

Rev. GLORIA EXERCITVS [*sic*] (around) T R (exergue). Same type as for Constantius II. Border of dots.

Av. 1.05 (26 mm.); wt. 106.6 (6.91 gm.); $\uparrow\downarrow$; = $1\frac{1}{2}$ -*solidi*. [Fig. 2.]

The obverses of both pieces, it will be noted, show the same type of legend, almost identical diadems, and the

² The acquisition of this medallion by the Berlin Münzkabinett is noted in *Blätter für Münzfreunde*, 1918, p. 480, with brief description, but without illustration.

same style of treatment of hair, features, and drapery. Equally striking is the similarity in style between the two reverses. Though struck from different dies—witness, for example, the spelling mistake in “exercitus” on the Constans medallion and the fact that a wider expanse of paludamentum is seen hanging



FIG. 3.

down behind the figure on the Constans than on the Constantius piece—both display precisely the same type of trophy and cuirass and, on both, the standing figure of the Emperor is modelled in the same full, well-rounded, plastic style. The two medallions are obviously contemporaneous, parallel issues.

The third “Gloria Exercitus” medallion, published by Cohen³ and Gneecchi⁴ as of Constantinus I, but rightly placed in the Vienna Bundessammlung among the medallions of Constantinus II, was struck at Thessalonica.

Obv. **CONSTANTI—NVS P F AVG** Bust of Constantinus II, diademed, to right, seen three-quarters to front and wearing paludamentum and cuirass. Border of dots.

³ Cohen, ed. 2, vol. vii, p. 256, no. 241.

⁴ Gneecchi, *I medaglioni romani*, vol. i, p. 17, no. 28, tav. 7, no. 7.

Rev. **GLORIA EXERCITVS** (around) **Τ Σ Ε** (exergue).
Same type as for Constantius II and Constans. Border
of dots.

Av. 1.05 (26 mm.); wt. 103.4 (6.7 gm.); $\uparrow\downarrow = 1\frac{1}{2}$ -*solidi*.⁵
[Fig. 8.]

The portrait on the obverse undoubtedly displays certain affinities with coin-portraits of Constantinus I issued at the Thessalonican mint. For the treatment of the hair on the Vienna piece a close parallel is afforded by a silver *siliqua* of Constantinus I in the British Museum⁶; while our medallion also recalls, in a general way, the portraits of Constantinus I on an *aureus* in the Newell Collection⁷ and on a gold medallion in Leningrad.⁸ It would seem, indeed, that at Thessalonica the portraits of Constantinus I exercised a definite influence upon those of Constantinus II; for instance, a medallion of Constantinus II as Caesar in Berlin (**CONSTANTINVS NOB C**)⁹ shows a diademed head of him with the characteristic upward glance of his father. But the true kinship of the obverse of the Vienna medallion is with portraits, not of the father, but of the son. The two 3-*solidi* medallions struck at Thessalonica for Constantinus II's *vota decennalia* as Caesar¹⁰ show exactly the same features, the same square jaw and the same hair as on the "Gloria Exercitus" piece; while

⁵ Maurice presumably identifies the obverse-portrait as that of Constantinus II, since he does not include the piece among the issues of Constantinus I.

⁶ Delbrück, *Spätantike Kaiserporträts*, p. 77, no. 44, Taf. 4, no. 44.

⁷ *Ibid.*, p. 77, no. 45, Taf. 4, no. 45.

⁸ *Ibid.*, p. 77, no. 46, Taf. 4, no. 46.

⁹ *Ibid.*, p. 79, no. 5, Taf. 6, no. 5; Gneecchi, *op. cit.*, tav. 8, no. 8.

¹⁰ Gneecchi, *op. cit.*, tav. 9, no. 7 (Brussels), no. 8 (Morgan Collection).

the features, hair, and arrangement of the folds of the paludamentum on the chest on the latter obverse are paralleled by those on a *solidus* struck at Antioch for Constantinus II as Augustus¹¹ and issued, as the **VOT XXX** on the reverse proves, after his *vota vicennalia* in 337. The reverse of our Vienna medallion is identical in design and legend with those of the two medallions from the Trier mint, while showing a slightly different type of trophy and cuirass and the somewhat flatter, drier style characteristic of Thessalonica. There can be little doubt that all three pieces were issued at the same date and for the same occasion.

The new medallion at Bonn has thus completed for us a series of "Gloria Exercitus" $1\frac{1}{2}$ -*solidi* medallions struck for each of the three brothers at some date subsequent to September 9, 337, when all three assumed the title of Augustus as joint Emperors. According to the will of Constantinus I, Spain, Britain, and the two Gauls were to go to Constantinus II, Africa, Pannonia, and Italy to Constans, and Asia, Egypt, and the Orient to Constantius II, while Delmatius and Hannibalianus, the sons of the half-brother of Constantinus I, were to rule over the Dacias, Macedon, and Thrace and over Armenia Minor, Pontus and Cappadocia respectively. Both the latter were murdered in 337, soon after the death of Constantinus I, by the troops, who would have none but his sons to rule over them; and when the three brothers met in the summer of 338 to determine their respective spheres of government, the share of Delmatius was added to that of Constans. But it is fairly safe to assume that, during the interval,

¹¹ Delbrück, *op. cit.*, p. 80, no. 12, Taf. 6, no. 12.

Delmatius's share was administered by Constantinus II, in whose favour the balance of power was weighted from the first and who is known to have claimed, in general, an authority superior to that of his brothers and a kind of guardianship, in particular, over the youthful Constans.¹² The reverse type and legend "Gloria Exercitus" would appear to have commemorated, perhaps at the very moment when the Imperial title was assumed, the Roman army's recognition of the three sons of Constantinus I as the only true Augusti. Medallions were struck for Constantius II and Constans at Constantinus II's capital of Trier and for Constantinus II himself at Thessalonica, where he may have exercised a virtual control, pending the final settlement of Delmatius's territories on Constans. The partition of the Empire in the summer of 338 provides the natural *terminus ante quem* for our medallion-series.

J. M. C. TOYNBEE.

¹² Cf. O. Seeck, *Z.f.N.*, 21, p. 49 ff.; Evans, *Num. Chron.*, 1930, pp. 239-40.

IX.

THE COINAGE OF 'ALĪ DĪNĀR, SULTAN OF DARFUR, 1898-1916.

MR. WALKER's valuable note on this subject (*Sudan Notes and Records*, vol. xix, p. 147) inspired me to collect all the evidence still available at El Fasher concerning the issue of the *radina* piastres. Unfortunately the two men, Hamid Mohamed el Gorāni the silversmith, and Beshir Mohamed Radi the armourer, who made the dies, have already been gathered to their fathers; but I have been able to interrogate Hamid's two chief assistants, Abd el Hakim Adam and Idris Fadl Mula, also Hassan Sabil, the late sultan's chamberlain (*amin el beit*), Ismail Qamr el geila, the last *rais el worsha* or overseer of all the royal workshops, and Sheikh Mohamed el Sennari Ahmed, the late sultan's secretary.

These coins were not first struck in 1915 in order to finance the raising of an army with which to attack the Sudan Government, as stated by Mr. Walker. They were first struck owing to a shortage of small change at the end of 1908, and they continued to be struck until the sultan's return from Bringil in July 1914, when the issue was stopped by the sultan because there were then enough of these coins in circulation.

They were not made out of petrol tins, as has sometimes been stated, but out of copper in which there was a small percentage (about 10 per cent.) of silver.

Mr. Walker very kindly arranged for the analysis

of four specimens by Mr. Phelps of the Royal Mint, London, and the result was as follows:—

<i>Specimen No.</i>	<i>Regnal year</i>	<i>Silver</i>	<i>Copper</i>	<i>Tin</i>	<i>Nickel</i>
		per cent.			
1.	iv	12.8	80.9	(1.0)	small trace
2.	vi	12.4	81.4	trace	trace
3.	vi	7.4	82.6	(0.5)	small trace
4.	(not clear)	9.4	87.6	(0.5)	small trace

Mr. Phelps states that the figures given for tin are approximate, but that the amounts present cannot much exceed those given, and he concludes that tin can hardly be an intentional constituent of any of the coins. No. 2 has a white colour due to a thin coating of silver probably obtained by dissolving the alloy from the surface metal and polishing. The deficiency from 100 per cent. is apparently accounted for by dirt and products of corrosion. The coins were almost certainly made of silver and copper only, each metal of course containing small quantities of impurity.

The introduction of the issue was on this wise. During the first years of 'Alī Dīnār's reign, the only small change available was a limited number of the Egyptian piastres, which were known in Darfur as *Kabbashiat*, because they were introduced by the Kab-babish Arabs of Kordofan (Mr. Walker's figs. 1 and 2), and a few examples of a small silver Egyptian piastre locally known as *giragandi*.¹ In fact so great was the shortage that for a silver *rial majidi*, which was worth

¹ The other coins that circulated in Darfur at that time were Turkish, i.e. quarter, half, and one *rial majidi*. *Giragandi* is said to be a Sudan Arabic word meaning "small".

20 piastres, one could only obtain 14 piastres. When the sultan ceased striking *radina* piastres,² the rate of exchange was over 40 to the *rial majidi*, and 60 to the Egyptian silver 20-piastre piece.

In 1905 a certain Jewish merchant known as Khawaja

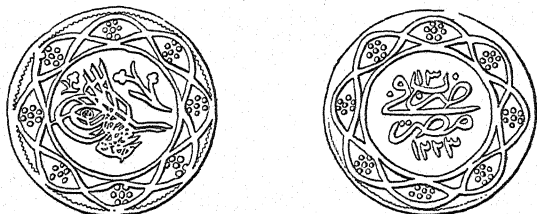


FIG. 1.

Ishag el Aini came to El Fasher, and seeing the shortage of small coins, obtained (? from Europe) a supply of nickel silver copies of the Egyptian "Kabbashi" piastre. Of twenty-seven specimens examined six bear the date 1213 A.H. and have the regnal year 13, while twenty-one are dated 1223 A.H. (Fig. 1).

The following is a description of a specimen:—

Obv. Tughra or official emblem containing the name of the Turkish Sultan Mahmūd II within circle surrounded by an entwined design containing in each of its eight loops a cluster of dots.

<i>Rev.</i>	١٣	13
	ضرب	minted
	في	in
	مصر	Cairo
	١٢٢٣	1223

All within design as on obverse.

Mr. Walker points out that these coins are thinner than the Turkish coins of Mahmūd II, and have no

² See below, p. 154.

graining (popularly called "milling") on the edge. Mr. Phelps's analysis gives—

	<i>Silver</i>	<i>Copper</i>	<i>Tin</i>	<i>Nickel</i>	<i>Zinc</i>
	per cent.				
"Kabbashi" piastre	46.0	52.7	nil	nil	nil
"Abu zaberlag" imitation (struck with countermark)	nil	63.0	nil	17.5	19.5

and he comments that the *abu zaberlag*³ coin consists of very clear metal, and is presumably a modern imitation, this alloy, known as nickel silver, being only found in modern products.

At first the sultan agreed to the importation of these false piastres, and the Jew began issuing them at the rate of 20 to a *rial majidi*. Soon the country became flooded with them, and there were many complaints from merchants as to their uselessness for external purchases, with a result that the sultan forbade the import of any more, and had all those that had been already issued stamped with a countermark, bearing his name 'Alī in Arabic علي and the date 1312, 1312 (see Fig. 2). Of 28 specimens examined, 7 bear the countermark on the *tughra* and 21 on the reverse. In return for the countermark the sultan took 5 out of every 20 coins stamped. Certain merchants, however, continued to import these false piastres, and eventually in 1907 a Gellabi called el Khatmi was caught stamping some of them with an imitation of the sultan's countermark, in return for two or three

³ See below, p. 153.

piastres for every twenty coins stamped. He was condemned to death and hanged, and from that date the sultan forbade any imitation Kabbashi piastres being accepted as legal tender, and they became known as *abu zaberlag*⁴, i.e. the false coins.

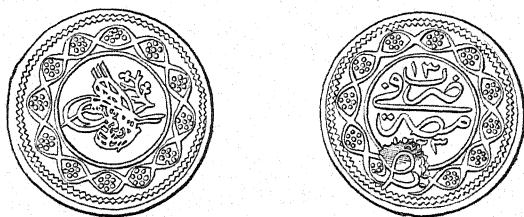


FIG. 2.

A year or so later Hamid Mohamed, the chief silversmith, quarrelled with sultan Hassan wad Abukr Naga, the Beigo sultan, and was imprisoned by 'Alī Dīnār. When he was arrested his house was searched, and in it among other things was found a die with which Hamid had been making forged Kabbashi piastres. This gave 'Alī Dīnār the idea of issuing his own coins, and he sent for the silversmiths Idris Fadl Mula and Abd el Hakīm Adam, and asked them whether it would be possible to alter the *tughra* and the name of the mint on the die so that the coins should be his own. It was beyond the skill of these silversmiths, but they visited Hamid in prison, and persuaded him, although reluctant to oblige, before he was released, to make the necessary die.

They then had a discussion with the sultan as to the composition of the metal to be put into these coins.

⁴ *Abu zaberlag*, a word of uncertain derivation, is an expression used in Darfur for a liar or anything false or forged.

Abd el Hakim suggested that there should be one rial of silver in every 80 piastres, but Idris Fadl Mula, who had worked in the Khalifa's mint in Omdurman, was against debasing the coinage more than necessary. About 400 piastres were then struck with great care from a mixture of copper and silver, which was such that every 32 coins contained a rial of silver. They were the exact size of their prototype, and had so much silver in them that it was obvious in their colour. These piastres were then taken down to the market by Idris and Abd el Hakim and displayed along with the sultan's sword, and people were told that the sultan would cut off the head of any one who refused to accept the new coinage. From that day the coins were known as *ghurūsh raḍīnā*, غروش رضىنا, "the piastres we have accepted". The silversmiths then reported to the sultan that the new coins had been accepted. He, however, was not pleased when he found that they had only made 32 out of a rial of silver, and for a long time demanded that they should make 80 to the rial. Eventually he agreed to 70; because although from that day onwards the agreed proportion was 4 rials of copper to every rial of silver,⁵ the coins were too thin when 80 were made from that amount of metal.

The method adopted was to mix the silver and copper over the fire. The bar of alloy so produced was then hammered out into long thin strips of metal in breadth one diameter and in length 70 diameters of the Kab-bashi piastre. From these strips plain discs were cut out with a circular punch. The edges of the discs were

⁵ More or less confirmed by the analysis, made at the Royal Mint, London, of four specimens which give on the average 83.1 per cent. copper to 10.5 per cent. silver.

then touched up with a file, and their colour whitened by immersion in a solution of *ardeib* juice.

At first five silversmiths were employed on this work. At the beginning of the day each silversmith was given one rial of silver and four rials of copper, and in the afternoon he had to produce to the head silversmith 70 plain discs. Normally only one silversmith was employed in striking the discs with the die. He was given a number of discs, and worked alone under the supervision of a guard, and when he had finished the coins were checked and handed to the overseer by the head silversmith. There were five dies in all, and these were kept in a box in the charge of the overseer of the *worsha*. The first two dies were made and engraved by Hamid, and the three others were copied from them at the sultan's command by the chief armourer, Beshir. Whenever a die became worn it was re-engraved by Hamid, who after three months as a prisoner was restored to his post with a warning to refrain from meddling in politics.

Each of the five silversmiths had a slave whom he trained in the work of coining.

Notables could bring metal to be coined and receive in return 49 out of every 70 piastres coined from it. The other 21 piastres were divided, half to the silversmiths as wages and half to the sultan. The sultan's share formed a fund from which further copper and silver was purchased when required.

For some time coins were only struck under close supervision inside the palace *hosh*, but later, in order to move a noisy business farther away from the royal ears, the mint was transferred to the *worsha*, which lay outside the palace on the west bank of the town

lake, and, the services of the silversmiths being required for other things, such as the ornamentation of saddlery and sword hilts, and engraving the sultan's name on his rifles, increasingly less supervision was given to the actual coining, which was left more and more

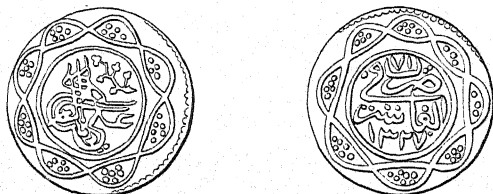


FIG. 3.

in the hands of underlings, with the inevitable result that the size of the coins decreased, and it is possible that there was no silver in the latest issues.

My informants are confident that no *radīnā* piastres were forged at El Fasher except by employees of the *worsha*. An armourer called Ibrahim el Haj 'Alī was on one occasion detected doing this, and was warned by the sultan that he must in future bring all his metal to the *worsha* to be coined, or face the consequences: and there must have been other similar forgeries.

The following is a description of a typical 'Alī Dīnār piastre (Fig. 3):

Obv. Tughra embodying the name of 'Alī Dīnār (علي دينار)
inside a border similar to that on the imitated
Kabbashi piastre described above.

<i>Rev.</i>	٧١	71 (regnal year)
	ضرب في	minted in
	الفاشر	el-Fasher
	١٣٣٧	1927

I have recently collected over 600 'Alī Dīnār piastres at El Fasher.

These may be grouped as follows:—

Type	Number of specimens	Figure in place of regnal year	Date
(a)	1	١٥	١٣٢٣
(b)	332	٧١	١٣٢٧ (Fig. 3)
(c)	92	١٧	١٣٢٧
(d)	6	٧١	١٣٢٧
(e)	7	٥	١٣٢٧
(f)	7	٧١	١٣٢١
(g)	2	١٧	٣٢١
(h)	1	٧١ (?)	١٣٢٧
(i)	2	٧١ (?)	١٣٢
(j)	1	?	١٣٢
(k)	2	?	٧١٣٢
(l)	1	١٧	١٣٨٧

In the remainder the "regnal year" is indistinct, and, whenever it can be read, the date is ١٣٢٧, 1327. Mr. Walker and I have examined them all together, and the following is a summary of our conclusions:—

Type (a) is full size and well made, and appears to be genuine. If it is, the date ١٣٢٣, 1323, is probably an adaptation of ١٢٢٣, 1223, a date which occurs on all specimens of the Egyptian prototype; and this type is probably one of the first struck in Darfur, for it is agreed by all that 'Alī Dīnār did not begin striking his own coins till the end of 1326 A.H. (= A.D. 1908),⁶ and that 1327 A.H. (= A.D. 1909) was the year in which they were first coined in any numbers, whence the date on the very large majority; for although they were coined continuously for five or six years after that, the date was never altered intentionally.

⁶ 'Alī Dīnār reached Fasher and became Sultan in Jāmādā al Awwāl 1316 A.H. = Sept./Oct. A.D. 1898.

Some of type (d) are rough, but one at least is well made, full size, and appears to be genuine.

Type (e) are all roughly made and possibly forgeries.

Types (f)–(l) are all carelessly made and contain mistakes in the date, which is presumably in each case intended for 1327. They are probably the work of individual forgers among the sultan's workmen. In type (h) not only are the *r* and *r* transposed, but the *r* is reversed, becoming *~*.

I have discussed the origin of the figures in the place of the regnal year at length with all my informants, and, although the engravers of the dies are both dead, I am certain that the fact that this figure on the prototype indicated the regnal year of the sovereign was not realized in Darfur, and I presume that the figures were in the first place copied unintelligibly from actual specimens of the Kabbashi piastre.

The coiners of the Mahdi and the Khalifa did not understand the regnal year. (See H. S. Job, *The Coinage of the Mahdi and the Khalifa in Sudan Notes and Records*, iii, p. 179.) Idris Fadl Mula, who worked for 'Alī Dīnār, and was one of my informants, worked in the Khalifa's mint at Omdurman as a youth from 1890 till the end of the Mahdia in 1898. He states that 'Alī Dīnār's coins were copies of the Turkish coins current in the Sudan before the Mahdia, as were the Mahdist coins also.⁷

It seems probable, therefore, both for the above

⁷ Idris Fadl Mula is a respected member of the family of Sheikh Ismail el Mufti, and Khalifa of that *tariqa* in El Fasher. He visited El Fasher on business in 1904, and having been detained there by 'Alī Dīnār against his will, has been there ever since.

reasons and also from the fact that the greater number of the piastres bear the date ١٣٢٧ and the regnal year ٧١ that this was the approved type, and that all the other types, including that with the same date and regnal year ١٧, were unintentional variations of it.

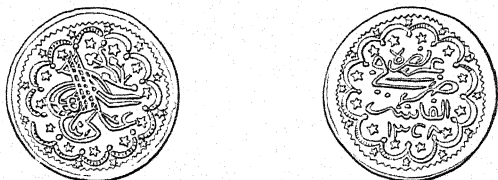


FIG. 4.

None of the types so far discovered bears the regnal year ٢١ as shown in Mr. Walker's Fig. 4. We have examined again the specimen from which his drawing was made, and agree that it is one of type (c) with the regnal year ١٧, although it also resembles type (d) in which the regnal year is ٧١.

The dies are said to have been left in the *worsha* after the occupation of El Fasher,⁸ but they have vanished, and were probably looted for the metal of which they were made in the interval between the flight of the sultan and the occupation of the town by the Government forces.

Since writing the above, I have discovered that for a short time 'Alī Dīnār also coined two other types,

⁸ Incidentally El Fasher does not mean "the camp" as stated by Mr. Walker, but is a word (? of Bornu origin) meaning the open space used for reviews, parades, &c., in front of the Sultan's palace, and so naturally came to mean the royal residence. El Fasher became the residence of the Fur sultans at the end of the eighteenth century. Mr. Walker intended to write "campus" and not "camp".

the half-piastre, and the 5-piastre or quarter-rial. These coins are now very rare, and I have only been able to discover three of each.

The 5-piastre piece (Fig. 4) is a copy of the Turkish (*majidi*) coin of similar denomination, as also were the Mahdist coins. On the obverse there is the name علي 'Alī in large script and دينار *dīnār* in small, with the , continued to form the *tughra*. On the reverse the legend is عز نصره "may his victory be glorious" above ضرب في الفasher "minted in el Fasher", and the date ١٣٢٨, 1328 A.H.

My informants say that about 800 of these coins were struck and put into circulation about four months after 'Alī Dīnār had begun striking piastres. They contained one part silver to three parts copper. The issue was not continued, because it was not a success. Quarter-rials and half-rials had never been common in Darfur. The coins in common use were the *rial majidi* and other Turkish *rials* and the Kabbashi piastre. 'Alī Dīnār's quarter-rial contained little silver, because silver at that time was scarce, and a rial's weight of pure uncoined silver cost 25 piastres in Darfur. It was not popular, because it was both debased and of an uncommon denomination, and when 'Alī Dīnār found that it immediately came back to the treasury in payment of taxes he discontinued it.

One of the three specimens of the 'Alī Dīnār quarter-rial which I discovered was being used at El Fasher as a 2-dirham weight. On being treated with *ardeib* juice, as were all 'Alī Dīnār's coins before issue, it looked just like silver. The specimens vary slightly in diameter, being 0.95, 0.95, and 0.85 in. respectively.

A few months after the quarter-rials were coined,

'Alī Dīnār suggested that they should make half-piastres. Up to that date the piastre had been the lowest unit of value, and as the piastre had a low purchasing power, there was no demand for half-piastres, and they were only issued for a very short time.

As far as my informants know, only one die was ever made for the half-piastre—by Beshir Radi—but the three specimens seem to come from two dies. Of two, which appear to come from the same die, one gives the regnal year as ٨, 8, and the other the date as ١٣٢٨, 1328. Their diameters are respectively 0.7 and 0.72. The third coin, which may be a forgery, and appears to be intermediate between these half-piastres and the piastre is 0.9 in diameter: and certainly comes from a different die, although the date and regnal year cannot be read with certainty.

A. J. ARKELL.

MISCELLANEA.

A FIND FROM THE PIRAEUS.

At the Piraeus, as in many Mediterranean harbours, money-changers have sat for centuries behind a table (*τράπεζα*), where they offer for sale cheap jewellery, rings, gems, and, very often, old coins. In March 1937, I saw in the possession of one of them a heap of freshly arrived tetradrachms, which, by their uniform oxidization, colour, and general aspect, at once appeared to me to come from one hoard. Closer examination and careful inquiries from the owner—one of those friendly and reliable refugees from Smyrna—confirmed my first impression: shortly before, in February 1937, the coins had been unearthed in a garden at the Piraeus. Owing to the kindness of the owner, I was able to study 15, which were said to be all that were found. Subsequent inquiries were made and a thorough watch kept on the market during the following year, but no further coins were observed whose types and appearance suggested that they came from the same hoard. This fact, to some extent, confirms the reliability of the money-changer's account of it.

A short list (see pp. 164–5), based on my notes and casts of all the 15 pieces,¹ may be of interest. The coins are placed in the order of their condition, beginning with the most worn and ending with the best preserved specimens.

The interest of this find is that it very probably provides us with the first numismatic evidence of the famous siege of the Piraeus by Sulla in 87–86 B.C. For two months Archelaos, Mithradates VI's admiral, with his Asiatic invaders defended the harbour against the Roman legions, even after the latter had already conquered Athens on March 1, 86 B.C.² As two coins of the Pontic adventurer are mixed with a total of 13 Athenian tetradrachms of the

¹ These casts are now in the British Museum. The hoard is briefly recorded in S. P. Noe, *Greek Coin Hoards*², *A.N.S.N. and M.*, no. 78 (1937), p. 216, no. 818.

² Plutarch, *Sulla* xii seq.; Strabo ix, 396; Appian, *Mithrad.* vi, 30 seq. Cf. *C.A.H.* ix, p. 246 seq.

New Style, the little hoard was most probably buried during the final phase of that siege, when its owner, in fear of a sack, hid his property away.

There is only one other hoard showing a similar composition, unearthed long ago, on the occasion of the excavations near the Athenian Dipylon in 1875.³ R. Weil carefully described its contents: 4 Mithradates tetradrachms with 54 Athenian coins (32 tetradrachms and 22 drachms) of the New Style.⁴ The new hoard from the Piraeus contains 8 specimens among its 13 Athenian pieces, which belong to four series of magistrates' names already well represented within the contents of the old Dipylon find (nos. 6-13). The rest of the five more or less worn pieces belong to different series, not represented in the older hoard (nos. 1-5). Both hoards thus show a majority of pieces in good condition all coming from the same series. Mr. M. Kambanis, in his recent papers on the relative and absolute chronology of the Athenian New Style coinages,⁵ has given good reasons for dating the series, to which the majority of our coins belong, to the earlier part of the first century B.C. Their presence in our hoard thus adds further and welcome confirmation, from another quarter, of his conclusions.

The Mithradates coins of the Piraeus find both show the same peculiarity already noticed by R. Weil on the four specimens of the Dipylon hoard and explained by Th. Reinach in his *Recueil Général*: a single letter A in the field of the reverse above the monogram, very probably representing an otherwise unknown era, established by Mithradates at Pergamon or Athens at the height of his power.⁶ The first of our Pontic tetradrachms adds, with its second letter A in the exergue, the first month of that era (see illustration). This coin thus provides us with the very first of these rare issues. In the Dipylon hoard, and from a few other sources since then, only the three months B, Γ, and Δ have been noticed.

³ S. P. Noe, *Bibliogr. of Greek Coin Hoards*², *Num. Notes and Mon.* 78 (1937), p. 36, no. 95. The Delos Hoard of 1908 (Noe, p. 92, no. 312) in the Num. Museum at Athens is still inadequately published.

⁴ *Arch. Zeitung*, 1876, p. 163.

⁵ *Bull. Corr. Hell.*, vol. 58 (1934), p. 101 seq.; vol. 59 (1935), p. 101 seq.

⁶ E. Babelon et Th. Reinach, *Recueil général des Monnaies grecques d'Asie mineure*² (1925), pp. 8 and 18.

A SHORT LIST OF THE COINS.

PONTUS.

Mithradates VI. Eupator 121-63 B.C.



FIG. 1.

1. *Obv.* Head of the king r. with fillet in waving hair.


Rev. ΒΑΣΙΛΕΩΣ ΜΙΘΡΑΔΑΤΟΥ ΕΥΠΑΤΟΡΟΣ Stag feeding l.; in field l. crescent and star, r. monogram $\Xi\epsilon$, above A (year 1 of a Pergamene or Athenian era?); in exergue A (first month); whole in ivy wreath. Mint state. 16.71 gm. (FIG. 1.)

2. As preceding. *Rev.* in exergue Δ (fourth month). Mint state. 16.46 gm. *Rec. gen.*² (1925), Pl. Suppl. B, 10 (same dies).

ATHENS

New Style tetrachams

No.	Magistrates' names		Month	Symbol
3.	ΔΗΜΗ	ΙΕΡΩ	Series with two magistrates' names ?	?
4.	ΕΠΙΓΕΝΗΣ	ΣΩΣΑΝΔΡΟΣ	ΜΟΣΧΙ	HPA
5.	ΕΥΜΑΡΕΙΔΗΣ	ΚΛΕΟΜΕΝ	ΛΕΩΝ	B (?) ME
6.	ΣΩΚΡΑΤΗΣ	ΔΙΟΝΥΣΟΔΩ	ΑΡΤΕΜΩΝ	B ΣΩ
7.	ΘΕΟΔΩΤΟΣ	ΚΛΕΟΦΑΝΗΣ	ΣΩΤΑΣ	B ΣΩ (?)
8.	ΑΡΙΣΤΙΩΝ	ΦΙΛΩΝ	ΗΓΗ	K ΠΕ
9.	ΑΠΕΛΛΙΚΩΝ	ΓΟΡΓΙΑΣ	ΔΕΙΝΙ	ΔΗ (?)
10.	"	"	ΔΙΟΓΕ	?
11.	ΔΗΜΕΑΣ	ΕΡΜΟΚΛΗΣ	ΛΥΣΙ	Κ ΠΕΡ
12.	ΞΕΝΟΚΛΗΣ	ΑΡΜΟΞΕΝΟΣ	—	M ΑΠ
13.	"	"	—	Γ ΑΠ
14.	"	"	—	B ΔΑ
15.	"	"	—	B ΔΑ

The coin with month A now enables us to establish two different issues of these tetradrachms with a Mithradatic era: one with monogram  and month-numbers in the exergue and another with another monogram but without month-numbers. So far the first issue has the A only of the era, and nearly all known specimens come from Athens, the Piraeus, or other Greek sources. The second issue without month-numbers shows at least four different years (A-Δ), whereas the majority of the pieces come from Russian collections or other eastern sources. To Mr. E. S. G. Robinson I owe the suggestion that these two issues may perhaps represent a coinage prepared by Mithradates in connexion with his western expeditions. By the introduction of a new era they would then demonstrate the importance, which the Pontic king saw in these enterprises, when he felt himself at the summit of his adventurous career. Whether the first issue, obviously cut off during the first year of its coinage, could have been struck at Athens itself, cannot be proved—but it may be mentioned as a possibility. The second, however, continued for the next few years, and may have been struck somewhere farther to the east, perhaps at Pergamon itself. Both series, at any rate, suggest as the starting-point of the era the year 88/87 B.C., when the western expeditions and the agitation at Athens began. To suggest names for the monograms on these coins would be mere guess-work. But it is worth while pointing out, that the youthful portrait of the adventurous Pontic king, especially on those coins which may have been struck at Athens, is of remarkably good style.⁷

WILLY SCHWABACHER.

⁷ Th. Reinach, *op. cit.*, p. 18, has mixed both issues, and the monogram of the first is erroneously given with P as the small letter above it instead of O—perhaps under the influence of his idea that this monogram contains the name of Archelaus.

GOLD COINAGE OF THE REIGN OF THEODOSIUS I.

ADDENDUM.

In my article which appeared under the above title in *Num. Chron.*, 1938, pp. 205-46, the only dated evidence I could bring forward for the transition of mint-mark **COM** with western, to mint-mark **COMOB** with eastern, type of Thessalonica were the extremely rare **COMOB** *vota*-coins giving the figures **X-XV** for Arcadius, **XV-XX** for Valentinian II and Theodosius. The dissimilarity in style of portraiture and, in the case of Valentinian and Theodosius, of diadem also, makes us hesitate to treat these as a closely connected group (cf. *loc. cit.*, Pl. XII. 6; XIV. 1; XV. 6), though the two styles of portraiture and diadem occurring side by side with common reverse **VOT X MVLX XX** on Theodosius's *siliquae* (*loc. cit.*, Pl. XV. 12, 13) suggest that this is not an impossibility. Again, as *vota* coins apparently were struck in commemoration sometimes of the taking, sometimes of the payment of the vows; as at this time there were three emperors each with his own distinctive votive *quinquennium*, and as an emperor might, and usually did, combine a reverse commemorating the vows of one with the obverse of each colleague, there is often some uncertainty both as to the correct appropriation of the vows and as to the precise time of striking.

It is easily seen that this uncertainty attaches to the evidence offered to us by the three *vota*-coins mentioned above.

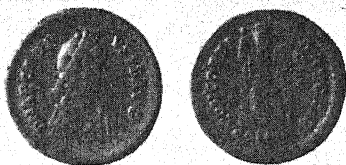
Fortunately, I have recently seen in Dr. L. A. Lawrence's collection, a coin which, I think, gives us a sure *terminus ante quem* for the introduction at Thessalonica of Theodosius's *Concordia* type with the new mint-mark **COMOB**.

Obv. **DN ARCADI-VS PFAVG** Bust, rosette-diademed, draped and cuirassed r.

Rev. **CONCORDI-AAVGGG** Constantinople seated (as in "X" of my "Thessalonican issues"), holding shield inscribed **VOT V MVLTX**. Mint-mark **COMOB**.

The coin is *Æ* but struck from an *Δ* die, which beyond doubt was perfectly genuine. Such replicas of late *solidi* in *Æ* or, more commonly, *Δ* are not rare—there are many in the Ermitage cabinet—and their evidence, so far as I have noted, is quite trustworthy. In the present case the portrait

is in the style of those of Valentinian II (*loc. cit.*, Pl. XII, 4, 6), with which by its rosette-diadem with the unusual three "tails" it is clearly connected.



Here the *vota* are appropriate only to Arcadius, and the coin must be dated before January 19, 388, when he would be entering on his second *quinquennium*.

The same eastern **CONCORDI-AAVGGG** *vota*-type, but with Θ added to the legend, is found at Mediolanum in fairly large numbers for Arcadius. I suggested that it marked the beginning of the final year of his first *quinquennium*. It is natural to assume that the new type started simultaneously in Valentinian II's mints of Mediolanum and Thessalonica, but we are at once faced with a discrepancy in the *vota*-figures of the senior emperors at the two mints. At Mediolanum, where these *vota*-coins undoubtedly form a group, Valentinian II and Theodosius both have X-XV (XX), which would be appropriate to Theodosius only, since Valentinian had completed his *decennium* in November 385. At Thessalonica, where—equally undoubtedly—the *vota*-coins with V-X for Arcadius and XV-XX for Valentinian II are contemporaneous, the latter figures are appropriate to Valentinian alone, since Theodosius would not have completed his *decennium* until January 389. We should certainly at a mint so exposed to eastern influence as Thessalonica expect to find Theodosius represented in this "rosette-diademed" series with his *vota* X-XV(XX), as at Mediolanum. But all these coins are extremely rare. However, the discovery of the "unique" Arcadius which prompts this note strengthens the hope that the missing Theodosius may yet be found. Meanwhile we are fortunate in having in this coin not only the second of a votive "trio", but also the one which can provide the most valuable evidence for the dating of the change of type and mint-mark at Thessalonica.

J. W. E. PEARCE.

A BERKSHIRE HOARD OF ROMAN COINS.

THE Coin Room at the Ashmolean Museum contains, besides its numismatic collections proper, a number of hoards—(chiefly Greek and Roman) which have been preserved intact—or nearly so—for the purposes of study and comparison by students. A recent acquisition has extended the range of Roman hoards by the addition of a characteristic example. The 30 *antoniniani* comprised by it are as follows:¹

- 6 GALLIENUS. *R.I.C.* 164 (κ), \overline{N} ; 177 (to r.), \overline{E} ; 236 (κ), $A \mid$; 267 (κ), $\overline{?}$, — a coin of double thickness and weight (5.55 gm.).
(*Salonina*, 2). *R.I.C.* 5, $\mid \Delta$; as 13, but \mid .
- 5 CLAUDIUS GOTHICUS. *R.I.C.* 48 (κ), \mid (2 coins); ? 91 ff. (double-struck); as 98, but (c), $\frac{\mid}{?}$; ² 157, $\frac{\mid}{T}$, — a thick and heavy coin (4.67 gm.).
- 13 VICTORINUS. *R.I.C.* 57 (F); 61 (c) [—ENTIA] (2 coins); 67 (F); 71 (c); 78 (c); 114 (c), $\frac{\times}{\mid}$; 118 (c), $\frac{V}{\times}$ (5 coins); 122.
- 5 TETRICUS I. *R.I.C.* 80 (?); uncertain of 87–89; 90; 126 (c); 148 (c).
- $\frac{1}{30}$ TETRICUS II. *R.I.C.* 258 (?).
- 30 Total

According to information given to the Museum by Mr. Joseph F. Riley, of Didcot, Berks., the coins were found in the Farley Hill district of Berkshire by a man of the name of Leadbetter, about half a century ago; and the thirty coins now in the Ashmolean apparently represent the total contents of the hoard. In themselves, they are of no unusual

¹ References to Mattingly-Sydenham [Webb], *Roman Imperial Coinage*, v. 1, 2.

² The portrait on this coin shows features strongly resembling those of Gallienus.

interest; but they show with particular clearness how swift was the financial crisis which overtook the world in Gallienus' reign. The issues of Gallienus and Claudius in this hoard (all of the mint of Rome save for a single coin of Claudius), though they are wretched enough pieces in comparison with the *antoniniani* of previous reigns, are themselves far superior to the coins of Victorinus and Tetricus; not only are they heavier (two coins being of really remarkable weight).³ but they are reasonably well struck, as compared with the broken and irregular flans of the Gallic pieces.

This little deposit was presumably buried in A.D. 270-271, that is to say, before the Tetrican coinage had time to swamp the hoard in that profusion in which it was so soon afterwards noticeable. It probably represents a sudden collecting of money, rather than any accumulation; for accumulation might have resulted in the lucky inclusion of a good silvered piece of Valerian or Postumus, most of which (it may be conjectured) were by this time safely hoarded away. We may therefore place it well in the middle of the Class III of Gallienus-Gallic Empire hoards defined on p. 52 f. of my *Coinage and Currency in Roman Britain*.

C. H. V. SUTHERLAND.

THE POUGHILL (DEVONSHIRE) HOARD OF ROMAN COINS.

AN unusual type of Roman hoard, of which no reliable record had been made before it was, metaphorically, re-interred and lost in a century's oblivion, has recently come to light again, and is now available for study in the Ashmolean Museum, which has acquired the greater part of the deposit.

After having seen, in *The Observer* of April 18, 1937, a column emphasizing the historical value of finds of coins, the Rev. Prebendary Melhuish, of Budleigh Salterton, Devonshire, very kindly communicated to me the information that his cousin, Miss E. B. Melhuish, also of Budleigh Salterton, had in her possession a number of Roman coins together with a statement that they were found on the property of her grandfather, Thomas Melhuish, at Poughill Barton (some 11 miles NNW. of Exeter) in 1836. Subse-

³ Did an occasional increase of weight perhaps seek to palliate, however slightly, the effect of the debasement of the metal?

quently Miss Melhuish had the kindness to send me the coins and the documentary evidence for examination. The result of the examination is to correct the previously existing conceptions of the Poughill hoard, for, although the earlier accounts were such as to allow Haverfield to include it in his list of Roman hoards found in Devonshire,¹ yet most of these accounts are either incomplete or inaccurate, as will be shown.

The earliest literary reference to the hoard appears to be that in the *Gentleman's Magazine*, 1836 (2), p. 311, where mention is made of the finding of 40 silver coins of Trajan, Hadrian, and the Antonines at Wolfardisworthy, near Tiverton. W. T. P. Shortt in his *Sylva* (1841), pp. vi, 63, adds nothing of note except to say that the coinage of Sabina was represented. But in his *Collectanea Curiosa*, published a year later, Shortt gives a fuller description of the hoard (pp. 7-8); found at Poughill, $1\frac{1}{2}$ miles from Wolfardisworthy, it included *denarii* of Vespasian, Trajan, Hadrian, and the Antonines, with some illegible copper. Later references are those of Davidson (*Notes on the Antiquities of Devonshire* (1861), p. 68), who states that the hoard was of 40 silver coins of Tiberius, Vespasian, Trajan, Hadrian, Pius, and Aurelius, with a single Sabina,² and of Worth's *Roman Devonshire*,³ p. 80, where it is said that the hoard consisted of 40 silver coins, "chiefly *denarii* of Tiberius, Vespasian, Trajan, Hadrian, Antoninus Pius, Marcus Aurelius, and Sabine (*sic*), wife of Hadrian". Finally, the Woolcombe MS., preserved in the Devon and Exeter Institute at Exeter, repeats the substance of Shortt's account in *Collectanea Curiosa*, but without any mention of the bronze coins. It is just this association of \mathcal{R} with \mathcal{A} which gives the hoard the interest of the unusual. Unfortunately, however, though the silver has survived for re-examination, the \mathcal{A} coins are now lost.

The coins submitted to me by Miss Melhuish—all *denarii*,

¹ *V.C.H. Cornwall*, Part 5 (Romano-British Cornwall), p. 14.

² This is apparently the account which Haverfield chiefly followed in making his classification in the *V.C.H. Cornwall*, *loc. cit.*

³ Being the presidential address of R. N. Worth in *Report and Transactions of the Devonshire Association for the Advancement of Science, Literature, and Art*, xxiii (1891). I owe this reference to Miss Anne S. Robertson.

and 28 in number—were contained in a small silver box, on which was engraved “These Roman Coins were found on the Barton of Poughill, in the county of Devon, the Property and Residence of Thomas Melhuish, Anno Domini, 1836.” The box also contained a memorandum, on which was written “To be kept in the Silver box with the Coins”: this memorandum, headed “A Synopsis of the 26 (*sic*) Silver Coins & 14 Brafs ones”, in fact consisted chiefly of a contemporary newspaper account,⁴ with marginalia added to the paper to which the newspaper-cutting was attached, and a note records that the printed account was written by “Messrs. W. T. P. Shortt, Esq:^{er} M. N. S. &c & H. G. Fothergill, (clerk) antiquary”. The only passage of importance runs as follows:—

These coins were found in a shallow lake or pond, the vicinity of which had been much undermined by the subterrene workings of moles, producing a congestion of earth, which may have worked itself by degrees into the pond, along with the coins.—Some copper money was also found, but in an abraded state from the *aerugo* of ages. Mention is made in “White’s Selborne” (p. 27), an interesting little work (!), of a great quantity of coins, many of the same date with these, and also of the Lower Empire, found in the bed of Wolmer Pond, in the parish of Selborne, Hants, many years ago, and in a similar situation—in dry summers and windy weather.

The memorandum ends with the following written note:—

VI of the Brafs ones, belonged to Trajan’s, Hadrian’s and Antoninus Pius’ reign—and also, most probably, the other VIII, but they were so much defaced by rust and canker, that they could not be deciphered. The first 6 Brafs coins are in the possession of H. G. Fothergill, given to him (1836) by Tho^s Melhuish Esq:^{er}.

Details of the 28 ⁵ *denarii*, now acquired by the Ashmolean Museum, are as follows:—

⁴ Bearing on the back advertisements relating to Exeter and Newton Abbot and dated August 18, 1836.

⁵ No obvious intruders can be detected in the hoard, so that the figure of 26 given by the written memorandum would appear to be a mistake, unless two *denarii* were found subsequently to the main discovery.

- 2 VESPASIAN. *R.I.C.*⁶ 30 (A.D. 70-2, worn); ? 65 (A.D. 73, worn).
- 1 DOMITIAN. *R.I.C.* 136 [owl] (A.D. 88-9), rather worn).
- 6 TRAJAN. *R.I.C.* (?) 52 (A.D. 100-2, rather worn); 57 (A.D. 101-2, fair); 127 [dr.] (A.D. 103-11, rather worn); 128 (A.D. 103-11, worn); 142 [dr. l. sh.] (A.D. 103-11, worn); 318 (A.D. 114-17, rather worn).
- 9 HADRIAN. *R.I.C.* 39 (b) [2 coins] (A.D. 118, rather worn : worn); 101 a (A.D. 119-22, rubbed); 225 (d) (A.D. 134-8, fair—rubbed); as 238, but (b) (A.D. 134-8, fair—fresh); 243 (A.D. 134-8, fair—fresh); 280 [bust 2] (A.D. 134-8, rather worn); 300 (a) (A.D. 134-8, rubbed).
- (*Sabina*, 1). *R.I.C.* 398 (a) [to r.] (fair).
- 7 ANTONINUS PIUS. *R.I.C.* 38 (a), but dr. l. sh. (A.D. 139, worn); 177 (d) (A.D. 148-9, fresh); 183 (A.D. 148-9, sharp); 301 (A.D. 159-60, rubbed).
- (*Diva Faustina*, 1). *R.I.C.* 350^a (b) (fair).
- (*Pius and Aurelius*, 1). *R.I.C.* 415 (b) (A.D. 140, fair—rubbed).
- (*Aurelius*, 1). *R.I.C.* 463 (a) (A.D. 154-5, fair).
- 3 MARCUS AURELIUS. *R.I.C.* 80 (A.D. 163-4, fair—rubbed); 377 (A.D. 176-7, fair).
- (*Divus Pius*, 1). *R.I.C.* 441 (fair—fresh).

28 Total

⁶ *R.I.C.* = Mattingly-Sydenham, *Roman Imperial Coinage*, i, ii.

The combined details of the hoard may thus be summarized:—

	Æ	Æ
VESPASIAN	2	—
DOMITIAN	1	—
TRAJAN	6	{ 6
HADRIAN	9	
ANTONINUS PIUS	7	
MARCUS AURELIUS	3	—
UNCERTAIN	—	8
	42	

The association of Æ with Æ, which gives the hoard its unusual interest, has been discussed elsewhere⁷; at first characteristic of the northern areas of Britain, this association becomes increasingly common, during the second century of the era, in the south, which also claims the majority of unmixed Æ hoards of second-century date—a fact of which Shortt's reference to the Woolmer Pond hoard⁸ is an apt reminder. It is to be observed that only Shortt's *Collectanea Curiosa*, of the literary accounts cited above, preserves the tradition of the Æ coins in the Poughill deposit—a tradition which his earlier *Sylva* curiously enough omits, although Shortt himself appears to have been co-author of the original newspaper account of 1836, in which the Æ coins were recorded.

No Æ coins of Marcus Aurelius appear to have been recognized or suspected, and the latest coin in the hoard therefore appears to be the *denarius* of Marcus struck A.D. 176-7. But the deposit can hardly have been concealed until some few years after that date, for this *denarius* is in no more than fair condition: assuming it to have circulated steadily from the time of its first issue, we might possibly conjecture that it was buried in the years *circa* A.D. 185-90, if not even later. The absence of coins of Commodus is not very difficult to explain on this theory, for a comparison of

⁷ In my *Coinage and Currency in Roman Britain*, pp. 28 ff. In the Appendix (III) of Hoards there included I have erroneously classified the Poughill hoard as one of Æ coins only, ranging from Tiberius to Marcus Aurelius (p. 156). It should now be transposed, so as to follow the Trefeglwys hoard on p. 157.

⁸ *V.C.H. Hants.* i, p. 340.

coin-finds in Britain suggests that the volume of imperial silver in circulation, after beginning to decrease in output during the reign of Marcus Aurelius, became still more sparing under Commodus.

The Poughill hoard therefore shows us the not unusual phenomenon of the persistence in currency of the Flavian silver coinage for a century; this is characteristic of the majority of second-century hoards. The comparative scarcity of Domitian's silver, already noted,⁹ holds good for the Poughill hoard. Trajan's silver is frequent, but the peak comes with Hadrian, declining thereafter with Pius and (more sharply) with Marcus Aurelius. Regarded as a whole, this is no collector's hoard. Worn coins, which prevail for the Flavian and Trajanic periods, are frequent even among the Hadrianic and Antonine issues: and we may interpret the hoard—both the silver and the lost bronze—as a typical cross-section of currency in southern Britain in the last two decades of the second century.

C. H. V. SUTHERLAND.

A HOARD OF DENARII FROM KNAPWELL, CAMBS.

ON January 17, 1840, a hoard of denarii was found in the parish of Knapwell, and acquired, apparently intact, by Robert Fox, of Godmanchester. An account of the discovery and a list of the emperors included is given by Fox himself in *Num. Chron.*, 1841, p. 64.

In July 1938, by the courtesy of Mr. Patterson and Miss O'Reilly of the Cambridge Museum of Archaeology and Ethnology, I was permitted to examine 61 denarii from the hoard, now preserved in the Museum along with a manuscript of Fox's. The manuscript includes, besides the information supplied in the *Num. Chron.*, a description of the denarii in his possession, 78 in number, which is so detailed that it has been possible to identify each in Mattingly and Sydenham's *Roman Imperial Coinage*, vols. ii (1926) and iii (1930). In the resulting list, given below, the 61 denarii in the Cambridge Museum are shown in italic figures, and it is to these 61 that the notes on the wear of the coins refer.

⁹ *Coinage and Currency in Roman Britain*, pp. 19 ff., 27 ff.

VESPASIAN. 7. M. & S. 10, 37, 77, 90, 90, 99 *a*, 132. Worn.

TITUS (under Vespasian). 1. M. & S. Vespasian 169.
Fairly well worn.

TITUS. 1. M. & S. 22 *a*. Fairly well worn.

DOMITIAN (under Vespasian). 1. Cp. M. & S. Vespasian
238, but *obv.* CAES AVG F DOMITIANVS.
Fairly well worn.

DOMITIAN. 4. M. & S. 16, 139, 147, 173.
Very slightly—fairly well worn.

NERVA. 3. M. & S. 5, 20, 49. Fairly well worn.

TRAJAN. 11. M. & S. 59, 59, 67. Cp. 126 (but *rev.* Pax
standing l. holding olive branch and cornucopiae), 127,
159, 272, 272, 292, 343, 354. Slightly—fairly worn.

HADRIAN. 17. M. & S. 45 *a*, 85 or 86 (2), 101, 101 *b*,
118 (2), 127 *a*, 137 *a*, 137 *a*, 161 *d*, 202 *d*, 228 *d*, 241 *A a*,
245 *A d*, 268 *a*, 343 *c*. Very slightly—fairly worn.

SABINA. 3. M. & S. Hadrian 390, 390, 391.
Slightly—fairly worn.

L. AELIUS CAESAR. 1. M. & S. Hadrian 439.
Slightly worn.

PIUS. 9. M. & S. 20, 62 *b*, 117, 127 *c*, 154, 181, 249, 301,
313 *c*. Unworn—slightly worn.

FAUSTINA I (deified). 7. M. & S. Pius 353 *a*, 356 *a*, 360 *a*,
362, 377, 378 *a*, 394 *a*. Slightly—fairly worn.

MARCUS (under Pius). 1. M. & S. Pius 424 *a*.
Slightly worn.

FAUSTINA II (under Pius). 4. M. & S. Pius 502 *a*, 507 *a*,
508 *a*, 517 *c*. Slightly—fairly worn.

MARCUS. 2. M. & S. 211, 222. Very slightly worn.

FAUSTINA II (under Marcus). 4. M. & S. Marcus 669, 674,
676, 714. Unworn—fairly worn.

VERUS. 2. M. & S. Marcus 514, 576. Very slightly worn.

This hoard was made up of denarii ranging from the reign of Vespasian to that of Marcus and Verus, and the earlier coins seem to have been, on the whole, more worn than the later. As usual in hoards of denarii ending in the Antonine period, coins earlier than Trajan are comparatively few, while those of Trajan and Hadrian are most numerous. The latest dated coins are two of Marcus, struck in A.D. 170 and showing very slight traces of wear. The hoard was probably lost fairly soon after that date.

A large number of hoards of Antonine date, in gold, silver, and bronze, have been found in Britain. Examples of silver hoards ending with Marcus and Verus which have been fairly fully recorded come from Allerton Bywater,¹ Beachamwell,² Castle Bromwich,³ Chester,⁴ and Mere.⁵ The frequent occurrence of Antonine hoards in Britain reflects both the richness of the province and the troubles which perplexed it in that period.

ANNE S. ROBERTSON.

A ROMAN COIN HOARD FROM WIMBLINGTON, CAMBS.

THE discovery of this hoard is recorded by Babington in his *Ancient Cambridgeshire* as follows: "Mr. W. E. Rose also tells me that near the same spot [Stonea Grange Farm, Wimblington], a vase was turned up by the plough in 1848, containing at least 2,000 copper coins in a very decomposed state. Mr. Rose states that curiously enough the bottom of the vase contained a piece of lead evidently run into it in a liquid state, the size and thickness being equal to a two-penny piece."¹

The bottom of the pot and 52 of the coins are now preserved in Wisbech Museum. By the courtesy of the Curator, Mr. L. A. Curtis Edwards, I was recently permitted to examine them, and to clean and identify the coins. The pot had been of coarse grey ware with a black slip, and, as stated, a hole in the bottom had been plugged with lead. The

¹ *Num. Chron.*, 1925, p. 401.

² *Ibid.*, 1848, p. 102.

³ *Ibid.*, 1910, p. 13.

⁴ *Cat. of Roman Coins in Chester Museum* (1923), p. 47.

⁵ *Wilts. Archaeological Magazine XXVII* (1893), p. 176.

¹ *Cambs. Antiquarian Society's Publications*, xx (1883), p. 87.

coins are antoniniani, for the most part badly oxidized but little worn, and are distributed as follows:²

GALLIENUS. 8. M. & S. 164 (3), 165, 179 (2), 297, 514.

VICTORINUS. 7. M. & S. 45, 59, 61, 78, 114 (3).

CLAUDIUS II. 7. M. & S. 36, cp. 81 (*obv.* IMP CLAV-DIVS AVG; *rev.* T...IIIIII Pax standing l., holding olive branch and sceptre), 91, 92 (3), 143.

QUINTILLUS. 1. M. & S. 29.

TETRICUS I. 17. M. & S. 71, 79-81, 87 or 88 (2), 88 (2), 90, 100 (2), 100-102, 126, 136, 141 (3), 146 (2).

TETRICUS II. 11. M. & S. 224 (2), 247, 248, 258, 260, 270 (4), 272.

UNCERTAIN RADIATE. 1. *Obv.* Legend illegible. Bust radiate r. *Rev.* Female figure standing l.

Although these 52 antoniniani are only a small fraction of the original find of 2,000 coins it seems probable from their distribution and condition that they represent fairly well the contents of the whole hoard. If so, the hoard was one of a large class made up mainly of debased antoniniani ranging from Valerian or Gallienus to the Tetrici. In a recent article on a hoard of this kind from Amlwch, Anglesey,³ Mr. Mattingly suggests that in Britain, "the 'reform' coinage of Aurelian was only grudgingly accepted and that the base metal of the Tetrici and their peers continued to form the mass of current money as late as the fall of Allectus". If this view is correct, hoards like that from Wimblington may have been lost at any time between A.D. c. 270 and 296.

ANNE S. ROBERTSON.

² References are to Mattingly and Sydenham, *Roman Imperial Coinage*, vols. V. i (1927) and ii (1933).

³ *Bulletin of the Board of Celtic Studies*, ix (1938), p. 163.

A BYZANTINE HOARD FROM TEL ATCHANA, NORTH SYRIA.

THE exact circumstances of the finding of this little hoard are unknown; but, so far as can be judged, it is of recent date and comes from the neighbourhood of Tel Atchana in North Syria, the scene of the excavations now being conducted.

The hoard consisted of the following coins:

(Wroth, *Imperial Byzantine Coins in the British Museum*, vol. ii.)

A. Pl. LV ff., attributed to John I and successors.	1
B. Pl. LVIII. 3, 4, attributed to Michael IV. (Three overstruck on A.)	12
C. Pl. LIX. 8, attributed to Constantine IX.	3
D. Pl. LX. 6, 7, attributed to Theodora. (One overstruck on A, 2 on B.)	21
E. Pl. LX. 16, attributed to Isaac I.	1
F. Pl. LXI. 6, attributed to Constantine X.	9
G. Pl. LXI. 7, 8, attributed to Constantine X. (Six overstruck on B, 1 on D, 1 on D and also on C (?), 3 on F.)	24
H. Pl. LXI. 9, attributed to Constantine X. (Two overstruck on D, 1 on G.)	10
I. Pl. LXIII. 1-3, attributed to Michael VII. (One overstruck on D.)	2

Total 83

With them were 16 coins, of the class attributed to Edessa by G. Schlumberger, *Numismatique de l'orient latin*, p. 22, Pl. I. 13-15: one of these was overstruck on I above. There was also one Ommayad coin of c. A.D. 750.

The attribution to reigns of the anonymous Byzantine copper has been carefully considered by Wroth, *op. cit.*, pp. 480 ff.

Bellinger, in a recent paper (*Numismatic Notes and Monographs*, American Numismatic Society, no. 35), has made some suggestions for revision, some at least of which must certainly be accepted. Our class D, for example, represented here by 21, cannot belong to the short reign of Theodora 1055-1056. Constantine X, with classes G and H, 34 coins, certainly his, has no need of the 9 coins of Class F. Class C is perhaps placed too early, Class F too late. The "Edessa"

coins are again, as in previous hoards, clearly tied down to the reign of Alexius I and the First Crusade. As they are found freely at Corinth as well as in Syria, Bellinger is certainly right in declining to attribute them to Edessa or any other one mint. Whether Alexius struck the coins for the Crusaders or left them to provide for themselves cannot quite so readily be settled. The coins are similar to, but not identical in style and fabric with, coins of his reign.

HAROLD MATTINGLY.

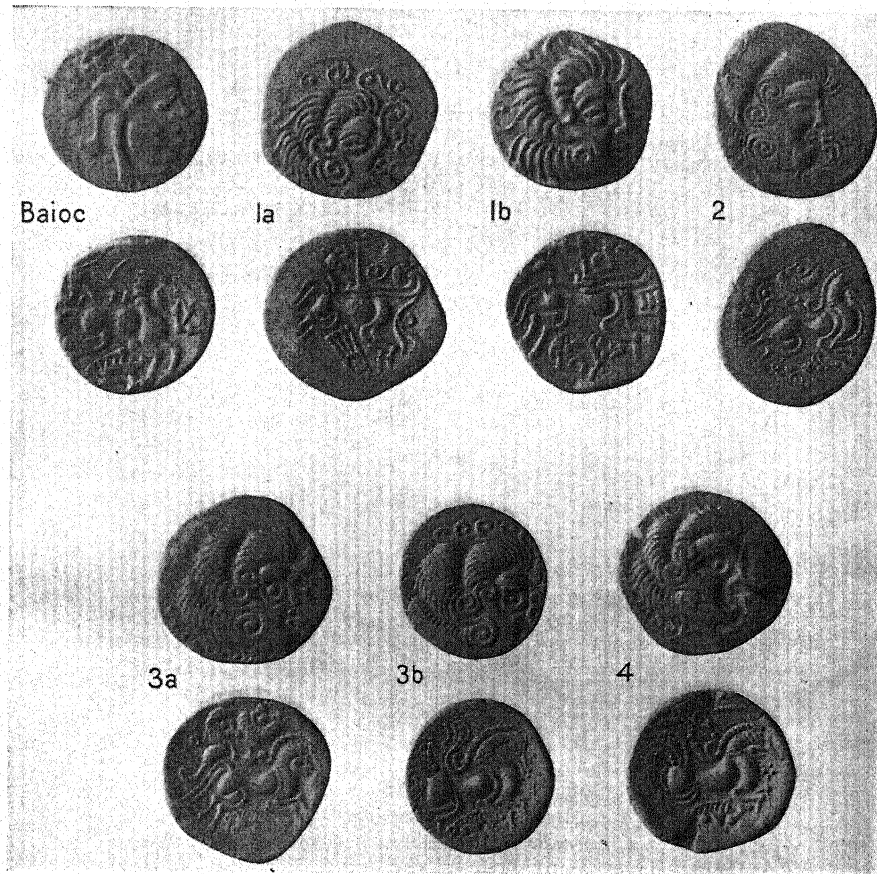
THE LA MARQUANDERIE HOARD OF ARMORICAN COINS.

On April 22, 1935, an unusually large hoard of Armorican coins was found at La Marquanderie, St. Brelade, in the Island of Jersey. When found, the hoard must have numbered well over 11,000 pieces. They were not contained in any vessel but were covered by some large stones and were about 1 ft. 8 in. under the surface. 10,546 of the coins were presented to the Société Jersiaise. A preliminary illustrated report on the coins by Major N. V. L. Rybot has been published in the *Bulletin of the Société Jersiaise*, 1937, vol. xiii, pp. 153-90. Dr. H. E. Stapleton is preparing the full report. I am publishing this brief notice by the kindness of Major Rybot.

The great majority of the 10,546 coins recorded belong to the four classes which occur most frequently in the hoards from Jersey. The coins of the first group (De La Tour J 37; Evans, i, 8, 12) number 859; most have the lyre, though a few have the boar, beneath the horse. The coins of the second group (De la Tour 6614 or 6634) number 1,295. The coins of the third group (De La Tour J 28; Evans i, 4, 5) number 1,975. The coins of the fourth group (De la Tour 6598; Evans, i, 1) number 6,410. In addition there are seven coins of the type of De la Tour J 29 or 6969; attributed by him to the Baiocasses. They have either a boar or a lyre below the horse and are probably the earliest coins in the hoard.

The order in which the chief classes are placed has been suggested by the progressive divergence of the types from their gold forerunners. It is not necessary to suppose that all these coins came from the same mint, and it has often been thought that the different types are contemporary. The fact, however, that each class is represented by more coins than

the one before, lends some weight to the possibility that these coins are the successive issues of a single mint. These proportions are not individual to this hoard ; they are



reproduced, for instance, with considerable accuracy in the hoard which De Donop published in 1838. The numbers represented in this hoard, so far as they can be told from De Donop's illustrations, are Class I 116, Class II 119, Class III 142, Class IV 380, "Baïocasses" 3. The comparative percentages are :

	"B"	I	II	III	IV
La Marquanderie	0.1	8.1	12.3	18.7	60.8
De Donop	0.4	15.3	15.6	18.7	50.0

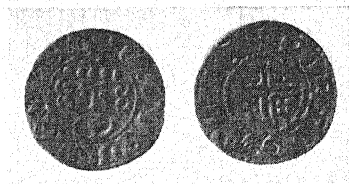
For purposes of clarity one example of each of the types mentioned is illustrated. The coins illustrated are not actually from the hoard but are of similar types in the British Museum.

Coins of all these types were found by Dr. Mortimer Wheeler at Petit Celand, near Avranches in Brittany, in 1938 in circumstances which showed they were current about 56 B.C. (see *Antiquity*, 1939, p. 67, Pls. VII-VIII).

DEREK ALLEN.

A STERLING OF SANCHO II OF PORTUGAL.

THE coin illustrated below was presented to the British Museum by Miss Sarah Banks in 1818. It is a contemporary



copy of a "short-cross" penny of the time of King John or Henry III, probably Lawrence Class V (1205-1218) or Class VI (1218-1223). It reads however:

Obv. SANCIVS · REX

Rev. ★ PORTVGALLIA

It weighs 18.3 gr. (1.19 gm.), which is somewhat under the weight of the English coins. It is slightly double-struck.

Copies of "short-cross" coins are common in various parts of Europe, but none before have been recorded from Portugal. It must have been struck by Sancho I (1185-1211) or Sancho II (1223-1248), probably the latter. Coins of both kings are known, of Sancho I in gold and billon, of Sancho II in billon only. The legend is normal for coins of Sancho I. Though this coin could have been struck in his last years, it is easier to attribute it to Sancho II. Early Portuguese coins are somewhat scarce, and it is interesting to be able to add a new coin to the series.

DEREK ALLEN.

SOME RECENT CIVIL WAR HOARDS.

ASHAMSTEAD GREEN, READING. Found in Morrell's Shaw copse, now built over, in 1935, 16 shillings and 25 sixpences of Elizabeth; 11 shillings and 3 sixpences of James I; and 7 shillings of Charles I: date of burial about 1640. All now in the Reading Museum.

ASHBROOK, GLOUCESTERSHIRE. Found in the grounds of Manor Farm, Ampney St. Mary, Ashbrook, on November 13, 1935, in a pot, broken and not preserved, 3 shillings and a sixpence of Edward VI; 4 shillings of Philip and Mary; 137 shillings and 44 sixpences of Elizabeth; 65 shillings, a Scottish shilling, 4 Irish shillings, and 3 sixpences of James I; 6 half-crowns (one Oxford, one Oxford-Shrewsbury mule), one Scottish half-crown, and 78 shillings (one Aberystwyth) of Charles I: date of burial about 1646. 22 coins acquired by the British Museum and 16 by the Stroud Museum.

CATFORD, KENT. Found on the Hall Park Estate, Oldstead Road, Catford, on December 6-7, 1937, in a pot which was broken, 24 laurels, 9 half-laurels, and a quarter-laurel of James I; 51 unites, 22 half-unites, and 3 quarter-unites of Charles I: date of burial about 1644. 12 coins acquired by the British Museum.

CHESTERFIELD (VICAR LANE), DERBY. Found in 1934, 2 shillings and nine sixpences of Elizabeth; a half-crown, a Scottish half-crown, a shilling, and 3 sixpences of James I; 10 half-crowns (one York), 4 shillings, and a sixpence of Charles I: date of burial about 1643. One coin acquired by the British Museum and one by the Royal Mint.

CHESTERFIELD (PRESTIGE), DERBY. Found in a demolished house, 3 shillings and 3 sixpences of Elizabeth; 3 shillings and a sixpence of James I; and a half-crown, 6 shillings, and a sixpence of Charles I: date of burial about 1644. One coin acquired by the British Museum.

HADLEIGH, SUFFOLK. Found on March 26, 1936, in digging the foundations of the Ipswich Industrial Co-operative Society beneath a paving-stone, a shilling of Edward VI; 23 shillings and 24 sixpences of Elizabeth; 14 shillings and a sixpence of James I; 33 shillings and a sixpence of Charles I: date of burial about 1649. One coin was bought by the British Museum and 47 by the Ipswich Museum.

HEADINGTON, OXON. Found on November 1st 1937, among the roots of a tree, 5 shillings and 17 sixpences of Elizabeth; 5 shillings, a sixpence, 4 Irish shillings, and 2 Irish sixpences of James I; 16 half-crowns of the Tower, 6 of Oxford, 7 shillings of the Tower, one of Shrewsbury, and one of Oxford of Charles I: date of burial about 1645. 3 coins were acquired by the British Museum and the remainder by the Ashmolean Museum. (Full report in *B.N.J.* xxiii.)

LEICESTER. Found in the basement of 15 Marbel Place on December 15, 1937, 4 groats of Mary and a sixpence of Philip and Mary; 3 shillings, 15 sixpences, and a groat of Elizabeth; 10 shillings and 2 sixpences of James I; 14 half-crowns, 24 shillings, and 3 sixpences of Charles I; a thistle-mark of James I; and a half-real of Ferdinand and Isabella: date of burial about 1645. All the coins were acquired by the Leicester Museum.

MUCKLEFORD, DORSET. Found on January 18, 1935, by Mr. George Chell in a bank near Higher Muckleford Farm, 51 unites, 2 half-unites, 2 Scottish unites, 18 laurels, 3 half-laurels, and 2 quarter-laurels of James I; and 34 unites and 3 half-unites of Charles I. A full report appeared in the *Proc. Dorset Nat. Hist. and Arch. Soc.*, vol. lvii, pp. 18-38: date of burial about 1638. 25 coins acquired by the British Museum and 10 by Dorchester.

PRESTATYN, FLINTSHIRE. Found in the ruins of an old house in the High Street on November 21, 1934, 5 shillings and a groat of Philip and Mary; 184 shillings, 182 sixpences, and 2 groats of Elizabeth; 107 shillings, 1 Scottish shilling, 25 sixpences, and 1 Scottish sixpence of James I (dated 1614); a half-crown, 9 shillings, and a sixpence of Charles I: date of burial about 1643. 113 coins were acquired by the British Museum and 50 by the National Museum of Wales.

READING, YIELD HILL. Found on April 16, 1934, at Yield Hill, Reading, 3 laurels, 4 double-crowns, and 2 Britain crowns of James I; 4 unites and 4 quarter unites of Charles I: date of burial about 1641. 8 coins were acquired by the British Museum and 9 by the Reading Museum.

WANTAGE, BERKS. Found in April, 1937, during work at Childrey Manor, 19 unites, 2 Scottish unites, and 11 laurels of James I; and 12 unites of Charles I. A full report appeared in the *Berkshire Arch. Journ.*, 1937, pp. 82 ff.: date of burial about 1640. 6 coins acquired by the British Museum and 3 by the Reading Museum. DEREK ALLEN.

X.

NOTES ON THE OXFORD COLLECTIONS.

(5) LYDIA.

[SEE PLATES VIII AND IX.]

THIS instalment of notes follows the same general lines as its predecessors. The second century B.C. bronze coinage of Sardes is rather disproportionately represented, as it does not seem to have been closely studied, and an examination of the monograms might be useful. Attention may also be directed to the two coins of Hypaepa, with obverses of Domna and Plautilla, coupled with the same reverse die: this may throw light on the principles of working the mints in provincial towns under the Empire, if coins with the heads of two empresses were turned out as parts of the same batch.

ANINETUS.

Plautilla.

1. $\zeta\Phi\Lambda\Lambda\Lambda\ \Sigma\tau\iota\lambda\lambda\alpha$ Bust r., draped, crowned with stephane.

\curvearrowright ANI NH CI (bel.) \rightarrow N Ω Horse standing r., near foreleg raised: in background, palm-branch \nwarrow

$\mathcal{A}\mathcal{E}$ \downarrow , 19.5 mm., 4.11 g. (Nicolaidēs, Smyrna)

This is probably the same type as Inv. Waddington 4862.

APOLLONOSHIERON.

Tiberius.

1. \curvearrowright TIBEPIOCKAICAP Head r., laur.

Σ ΑΠΟΛΛΩΝ Ι ζ ΕΡΕΙΤΩΝ Kithara \uparrow

$\mathcal{A}\mathcal{E}$ \uparrow , 15 mm., 2.48 g. (W. T. Ready)

ATTALEA.

1. Head of Herakles r., bearded: b. d.

ΣΑΤΑΛ ΘΕΑΤΩΝ Eagle standing to front, head r., wings open: b. d.

Æ ↑, 15 mm., 1.90 g. (Nicolaidēs)

A late issue, probably of the second quarter of the third century A.D.

BAGIS.

1. ΔΗΜΟC Head r., laur., youthful, drapery by neck.

ΣΕΠΙΑCΚΛΗΠΙΑ ΔΟΥ (ex.) → ΒΑΓΗΝΩΝ River-god reclining l., himation over legs, holding reed in r., resting l. elbow on inverted vase.

Æ ↓, 20.5 mm., 3.53 g. (Nicolaidēs)

This is probably the same type as Inv. Waddington 4884.

Geta.


2. ΣΑΥΚΑΙΠΟ ΔΣΕΓΕΤΑCCE Bust r., laur., wearing cuirass and cloak, back view.

ΣΕΠΙΔΙΟΓΕΝΟ ΔΑΡ.ΒΑΓΗΝΩ
VC N Dionysos standing to front, head l., nude, holding kantharos in r., resting l. on thyrsos.

Æ ↓, 24 mm., 8.41 g. (New College)

BLAUNDUS.

1. Head of Apollo r., laur.: b. d.

r. ↓ [M]ΑΥΝΔΕ l. ↓ ΩΝ  Quiver (on r.) and strung bow ↑

Æ ↓, 16.5 mm., 5.36 g.

The monogram occurs with the Zeus/Hermes type in *B.M.C. Lydia* 44/23.

2. Head of Zeus r., laur.

r. ↓ ΜΑΥΝ l. ↓ ΔΕ ΩΝ Female figure standing l., wearing long chiton, holding out r. hand towards serpent erect facing her, cornucopiae on l. arm: irregular line b.

Æ ↑, 17 mm., 3.42 g. [Pl. VIII. 1]

This example of the types of *B.M.C. Lydia* 45/28 seems worth illustrating on account of the crudity of the work.

CILBIANI.

Sept. Severus.

1. ΣΑΥΤΚΑΣ ΠΠΣΕΟΥΗΡΟCΠΕ Bust r., laur., wearing cuirass and cloak, back view. [Round counter-mark, B].

ΣΕΠΑΜΑΝΑΠΛΟΥΤΙΑ ΞΝΟΥΑΡΧΤΒΝΕΙΚΑ (ins.)
 ΣΕΩΝ →ΚΙΑ ΒΙΑ Cult-statue to front, wearing high polos, fillets hanging from outstretched hands: at base, two stags standing r. and l., facing outwards.

Æ ↓, 32 mm., 16.38 g. (New College)

Caracalla.

2. ΣΑΥ·Κ·Μ·ΑΥ ΞΑΝΤΩΝΕΙΝΟC Bust r., laur., wearing cuirass and cloak, back view.

ΩΕΠΙΤΡΥΦΩΝΟCΒΦΙΛΟCΕΒΑΡΧΤΒΝΕΙΚ(ex.)→ΑΕ
 ΩΝΚΙΑ (ins.) ΞΒΙΑΝΩΝ City-goddess seated l. on low throne, wearing long chiton, r. hand outstretched: behind her, Nike standing l., wearing long chiton, on head of eagle r., holding in her r. wreath over head of goddess, in l. palm-branch.

Æ ↓, 29.5 mm., 12.72 g. (New College)

The type is virtually identical with that described on a coin of Julia Domna by Imhoof-Blumer (*N.Z.* xx. 14, no. 20).

Julia Mamaea.

3. ΣΙΟΥΜ ΞΑΜΑΙΑ Bust r., draped, crowned with stephane.

ΞΝΕΙΚΑ ΞΕΩΝΚ Cult-statue standing to front, wearing high polos, fillets hanging from outstretched hands.

Æ ↓, 17 mm., 2.72 g. (New College)

DIOSHIERON.

M. Aurelius.

1. ΣΑΥΚΑΙΜΑΥΡΗΑΙ ΞΑΝΤΩΝΕΙΝΟC Bust r., laur., wearing cuirass and cloak, back view.

ΖΑΙΟC ΙΕ ΨΕΙΤΩΝ Zeus seated l. on low throne, himation over l. shoulder and legs, holding out phiale in r., resting l. on sceptre.

Æ ↓, 29 mm., 16.28 g. [Pl. VIII. 2]
(Nicolaidēs)

The type of the reverse is differentiated from that of *B.M.C. Lydia* 76/11 by the fact that Zeus does not hold a statue of Artemis.

Julia Domna.

2. ΖΙΟΥΛΙΑ ΨΕΒΑCΤΗ Bust r., draped. [Round countermark, laureate head r.]

ΞΕΠΙΑΠΟΛΛΩΝΙΔΟΥΒ·Τ (ins.) ΖΟΥ·ΦΟΨΙΒΟΥ (ex.) → ΔΙΟCΙΕΡΕΙ|ΤΩΝ Zeus seated l. on high throne, himation over l. shoulder and legs, holding out phiale in r., resting l. on sceptre.

Æ ↓, 30 mm., 15.33 g. [Pl. VIII. 3]
(Nicolaidēs)

Geta.

3. ΨΟCΕΠΓΕ ΨΤΑΚΑΙCΑΡ Bust r., laur., wearing cuirass and cloak, back view.

ΞΕΠΙΑΠΟΛΛΩΝΙΔΟΥΒΤΟΥΦΟΙΔΙ (ins.) ΖΟCΙΕΡ ΨΕΙΤΩΝ Tyche standing l., crowned with modius, wearing long chiton and peplos, holding in r. rudder, in l. cornucopiae.

Æ ↓, 24 mm., 5.61 g. [Pl. VIII. 4]
(Nicolaidēs)

GORDUS.

1. Bust of Herakles r., bareheaded and bearded, lion's skin around neck: b. d.

ΖΓΟΡΔΗ ΨΝΩΝ (ex.) → ΙΟΥΑ Stag walking r.: b. d.

Æ ↑, 14.5 mm., 1.52 g. (Nicolaidēs)

Probably second quarter of third century A.D.

HERMOCAPELIA.

Plotina.

1. ΨΠΛΩΤΕΙΝΑ ΞΕΒΑCΤΗ Head r.

ΞΕΡΜΟΚΑ ΠΨΗΑΕΙΤΩΝ Demeter standing l., wearing veil and long chiton, holding up ears of corn in r., resting l. on sceptre.

Æ ↓, 20 mm., 5.11 g.

Sept. Severus.

2. $\Sigma\text{AVTKAC } \Sigma\text{CEOVHPOC}$ Head r., laur.

$\Sigma\text{EPMOKAPH } \Sigma\text{ΛEITON}$ Athene standing l., wearing helmet, long chiton with diplois, and aegis, holding phiale in r., resting l. on spear: on ground behind, shield.

Æ ↑, 25 mm., 6.72 g. (Bodleian)

Published by Wise, p. 65: probably also Inv. Waddington 4992.

Caracalla.

3. $\Sigma\text{AV}\cdot\text{K}\cdot\text{M}\cdot\text{AV } \Sigma\text{P}\cdot\text{ANTONINOC} \leftarrow \text{CE}$ Bust r., laur. wearing cuirass and cloak, back view.

$\Sigma[]\cdot\text{TI}\cdot\text{KA}\cdot\text{IEPONVM } \Sigma\text{O } \Sigma\text{EPMOKAPH} \dots$
Zeus standing to front, head l., himation over l. shoulder and round legs, holding phiale in r., resting l. on sceptre: at his feet l., eagle l., head r., wings open.

Æ ↓, 33.5 mm., 16.99 g.

Elagabalus.

4. $\Sigma\text{AVTKMAVP } \Sigma\text{ANTONEINO}$
C Bust r., laur., wearing cuirass and cloak, back view.

$\Sigma\text{EΠICTPT } \curvearrowright\text{PV } \Sigma\text{ΦONOCAPEL}$
AA (ex.) → $\Sigma\text{PMOKA-}$
 $\text{ΠH}[Λ]|\text{EITON}$ Asklepios standing r., himation round waist and legs, resting r. on serpent-staff, facing Hygieia standing l., wearing long chiton and peplos, holding phiale in r., serpent in l.

Æ ↓, 33 mm., 20.16 g.

*HYPAEPA.**Sept. Severus.*

1. $\Sigma\text{A}\cdot\text{CEP}\cdot\Sigma\text{CEOVHPO} \leftarrow \text{C}\cdot\text{Π}$ Head r., laur.

$\Sigma\text{VPAIΠ } \Sigma\text{HNON}$ Cult-statue to front, crowned with polos, wearing long chiton with diplois and veil, hands extended.

Æ ↓, 18 mm., 2.48 g. (Nicolaides)

Julia Domna.

2. ΔΙΟΝΙΑ ΔΕΒΑΧΤΗ Bust r., draped. [Oval countermark, cult-statue to front, veiled, hands extended.]

ΣΕΠ·ΚΗΡΙΝΘΟ 2V·Δ·ΣΤΡΑ·Α (ex.) → VΠΑΙΠΗ | ΝΩΝ

Tetrastyle temple-front with arch between central columns: within, cult-statue to front, as on 1.

Æ ↓, 29 mm., 13.51 g. (New College)

Plautilla.

3. $\zeta\Phi\text{ΟΥΛ-ΠΛΑ}\ \Sigma\text{ΥΤΙΛΛΑ-}\Sigma\text{ΕΒ}$ Bust r., draped. [Oval countermark, cult-statue to front, veiled, hands extended: round countermark, B.]

Rev. legend and type as on 2.

Æ ↓, 30.5 mm., 13.78 g.

The reverses of 2 and 3 are from the same die: the oval countermarks on the obverses are from different stamps.

Caracalla.

4. ΣΑΥΜΑΥΡΑΝΤ ΩΝΙΝΟΚΚΕ Bust r., laur., wearing cuirass and cloak, back view.

ΣΕΠΙ ΣΤΡΑ Ψ-Τ-ΦΛ-ΛΕΩΝΙΔΟΥ (ex.) → ΥΠΑΙΠΗ |
ΝΩΝ Severus on horse galloping r., bareheaded,
with cloak flying from shoulders, javelin poised in r.:
below horse, man falling backwards, facing l.

Æ ↓, 35 mm., 21.96 g. [Pl. VIII. 5]

Valerian.

5. Ζ[Α]ΥΤΚΠΟΛΙΚ ΘΟΝΑΛΕΡΙΑΝΟΣ Bust r., laur.,
wearing cuirass and cloak.

ΟΚΟΝΔΙΑΝΟΥΣΤΡΥΠΑΙΠΗΝΩΝ Artemis standing to front, head r., wearing short chiton, with r. drawing arrow from quiver, holding bow in l.

Æ ↓, 27 mm., 6.89 g.

MAEONIA.

1. ΠΕΡΑΚΥΝΟΣ ΚΑΗΤΟΣ Youthful bust r., draped.

ΣΕΠΙΔΑΜΑΑ ΠΡΧΜΑΙΟΝΩ i. f. → N T Cult-
O B

statue to front, crowned with polos, wearing long chiton and veil.

Æ ↓, 22 mm., 6.45 g. [Pl. VIII. 6]
(Nicolaidēs)

This type was published by Imhoof-Blumer in *Kl. M.* i. 177, 6, and illustrated in *Nomisma* viii, Pl. ii. 27: this coin shows a slightly variant arrangement of the drapery of the statue.

MAGNESIA AD SYPYLUM.

Julia Mamaea.

1. CIOVMAME PACBACTH Bust r., draped.
CMAΓ NH CTΩ NCIP (ex.) → VΛOV Tetrastyle temple-front, open to apex: within, figure of Tyche standing l., crowned with modius, wearing long peplos, holding in r. rudder, in l. cornucopiae.

Æ ↓, 25 mm., 7.70 g. (Raye)

Published by Wise, p. 66.

MOSTENE.

Sabina.

1. CT[C]ABEINAC CEBACTH Bust r., draped.
CMOCTH CTNN Demeter standing l., wearing veil, long chiton, and peplos, holding in r. ears of corn, in l. bipennis.

Æ ↑, 15 mm., 2.22 g. [Pl. VIII. 7] (Bodleian)

Antoninus Pius.

2. CAV·KAICAP·ADPI· CTANTΩNEINOC Head r., laur.
CKE N· CTKA----- ex. → ANΔΩN|MOCT----
Helios standing r., radiate, with cloak hanging behind shoulders, holding torch in each hand, in chariot drawn by four prancing horses.

Æ ↓, 31.5 mm., 19.57 g. [Pl. IX. 1]

NUSA.

1. Heads of Hades, bearded, and Kore jugate r.

r. ↑[N]YΣAEΩN l. ↑ $\begin{matrix} \text{E}\Delta\text{I} \\ \text{E}\text{T}\text{O} \end{matrix}$ YΣ[-] Dionysos standing

l., wearing short chiton, holding in r. kantharos, in l. thyrsos transversely.

Æ ↑, 16 mm., 4.45 g. (Nicolaidēs)

There may have been another letter, off the flan, in the name of the magistrate.

Augustus.

2. Head r., bare: in laurel-wreath.

ΝΥΚ ΖΑΕΩΝ Head of Kore r.

Æ ↑, 20 mm., 4.15 g.

Elagabalus.

3. QANTΩΝΕΙΝΟΚΑΙCΑΡ Head r., radiate.

QNYCΑΕΩΝ Bust of Mēn r., wearing cap and draped, crescent behind shoulders.

Æ ↓, 17 mm., 3.29 g. [Pl. IX. 2.]

The head on the obverse seems to be Elagabalus rather than Caracalla.

Maximinus I.

4. ζ-----Γ·ΙΟΥΟΥ ΖΗΜΑΞΙΜΕΙΝΟC Bust r., laur., wearing cuirass and cloak, back view. [Round countermark, ζ]

ΖΝΥCΑ ΖΕΩΝ Kore standing l., wearing veil, long chiton, and peplos, resting r. on sceptre.

Æ ↑, 22 mm., 4.75 g.

PHILADELPHIA.

Julia Domna.

1. ΖΙΟΝΛΙΑ ΖΣΕΒΑCΤΗ Bust r., draped.

ΖΕΠΙΝΕΟΠΤΟΛΕΜΟ ΖΝΑΡΧΦΙΛΑΔΕΛΦΕΩΝ Tyche standing l., crowned with modius, wearing long chiton and peplos, holding in r. rudder, in l. cornucopiae.

Æ ↓, 26 mm., 5.40 g. (New College)

Diadumenian.

2. ΖΑΥΤ·Κ·Μ·ΟΠΕΛ·ΑΝΤΩ·ΔΙ ΖΑΔΟΥΜΕΝΙΑΝΟC Bust r., laur., wearing cuirass and cloak.

ΖΕΠΙ·ΑΡΧ·ΑΡΤΕΜΩΝ ΖΟCΦΛΦΙΛΑΔΕΛΦΕ ΩΝ Tyche standing l., as on 1 above.

Æ ↓, 26 mm., 6.70 g. [Pl. IX. 3]

SARDES.

1. Head of Apollo r., laur.: b. d.
Club \uparrow : l. $\uparrow \Sigma \text{AP} \Delta \text{I}$ r. $\uparrow \text{AN} \Omega \text{N}$, ab. A : in oak-wreath tied below.
 Ae \downarrow , 17.5 mm., 4.55 g. (Nicolaides)
2. As 1, but monogram on rev. A
 Ae \downarrow , 15.5 mm., 4.45 g.
3. As 1, but monogram on rev. M
 Ae \downarrow , 14.5 mm., 4.93 g. (Godwyn)
4. As 1, but monogram on rev. NK
 Ae \downarrow , 15 mm., 4.04 g. (Van Lennep)
5. As 1, but monogram on rev. W
 Ae \downarrow , 14 mm., 3.90 g.
6. As 1, but monogram on rev. K
 Ae \downarrow , 15.5 mm., 4.46 g. (Naville sale v)
7. As 1, but monogram on rev. P
 Ae \downarrow , 13.5 mm., 3.18 g.
8. Head of Herakles r., laur., beardless, lion's skin round neck: b. d.
Apollo standing l., nude, holding crow on r., laurel-branch in l.: r. $\downarrow \Sigma \text{AP} \Delta \text{IAN} \Omega \text{N}$, on l. A : in laurel-wreath tied below.
 Ae \uparrow , 18 mm., 5.11 g.
9. As 8, but on rev. A on l.
 Ae \uparrow , 16 mm., 5.84 g. (New College)
10. As 8, but on rev. l. $\downarrow \text{KPI}$ on A , ab. $\rightarrow \text{ME}$
 Ae \downarrow , 18 mm., 6.67 g. (Naville sale v)
11. As 8, but on rev. l. $\rightarrow \Sigma \Omega$ on KPA
 Ae \uparrow , 16 mm., 5.84 g. (G. J. Chester)
12. As 8, but on rev. l. $\rightarrow \text{TA}$ on OY
 Ae \uparrow , 17 mm., 6.08 g. (Bodleian)

13. Bust of Artemis r., hair knotted, draped, bow and quiver at shoulder.

r. ↓ ΣΑΡΔΙΑΝΩΝ, l. ↓ ΔΡΟΜΩΝ
↓ ΔΙΟΝΥΣΙ[ΟΥ] Athene
standing l., wearing helmet, long chiton with diplois,
and aegis, holding Nike on r., resting l. on shield,
by which spear upright.

Æ ↑, 22 mm., 7.65 g.

Vespasian.

14. ΟΑΥΤΟΚΚΑΙΟΒΕΣΠΑΙΑΝΩ Head r., laur.

ΣΕΠΙΦΛΕΙΣ[ΙΓΟΝ] ΣΟΥΒΑΡΔΙΑΝΩΝ i. f. l. ♂
Mên standing l., wearing cap, short chiton, and
chlamys, crescent behind shoulder, holding in r.
patra over altar, resting l. on sceptre.

Æ ↓, 22 mm., 6.85 g. [Pl. IX. 4]

Probably Inv. Waddington 5248.

SILANDUS.

Commodus.

1. ΣΑΥΤΟ·ΚΑΙ·Α· ΣΑΥΡΗ·ΚΟΜΟΔΟΣ Bust r., laur.,
wearing cuirass and cloak.

ΣΕΠΙΑΡΧΙΕ (between figures →) ΩΣ | ΚΑ | ΙΑ | Χ
ΣΤΑΤΙΑΝΟΥ (ex.) → ΣΙΛΑΝΔΕ | ΩΝ Cult-statue (on
l.) standing to front, crowned with polos and draped
with veil covering face, pillars (?) below arms: and
cult-statue (on r.) standing to front, crowned with
polos and draped, fillets hanging from outstretched
arms.

Æ ↑, 36.5 mm., 25.50 g. [Pl. IX. 5]

(New College)

The figure on l. answers to the type of the Lydian
Kore, according to Imhoof Blumer's classification
(*Nomisma* viii. 20): Head (*B.M.C. Lydia* 282) de-
scribed the statue as seated, but Imhoof disagrees
with this. On this coin the objects on either side of
the statue suggest a throne built round it, as in the
case of the Apollo of Amyclae: the statue itself is
clearly standing. The other figure is an ordinary
Artemis type.

STRATONICEA.

Hadrian.

1. $\Sigma\Lambda\text{V} \ \Sigma\text{TPAIA}[\text{NOC}] \ \sim\Delta\text{PIANOC}$ Emperor on horseback r., wearing cuirass and cloak, striking down with spear at boar running r.

$\sim\Xi\text{ΠICTPKAN} \ \Omega\Delta\text{IDOVBA}\Delta\text{PIANOΠOΛEITΩN}\Sigma\text{TP}$ Asklepios standing r., head l., himation over l. shoulder and round legs, resting r. on serpent-staff, looking back at Hygieia standing r., wearing long chiton and peplos, holding in r. serpent and feeding it from patera in her l.

Æ ↑, 25 mm., 10.52 g [Pl. IX. 6]

2. [Σ] $\Sigma\Delta\text{PIANON}$ Bust r., laur., wearing cuirass.
 $\Sigma[\text{I}]\text{N}\Delta \text{ --- } \Sigma\text{PATON}[\text{ }]$ Zeus seated l., himation round legs, holding phiale in r., resting l. on sceptre.

Æ ↑, 23 mm., 7.56 g. (Smyrna)

- 3 $\Sigma\Delta\text{PIANOC} \ \Sigma\text{KTICTHC}$ Head r., laur.

$\Sigma\Delta\text{PIANOΠ} \ \Sigma\text{Τ} \ \text{☞}$ Nike advancing l., wearing long chiton, holding in r. wreath, in l. palm.

Æ ↑, 19.5 mm., 4.08 g. (Smyrna)

Antinous.

4. $\Sigma\text{ANTINOOC} \ \Sigma\text{HPΩC}$ Head r., bare.

$\Sigma\Delta\text{PIANOΠOΛEITΩN} \ \Sigma \text{ --- } \Sigma\text{TPATONEIK}$ Nike standing r., wearing long chiton and peplos.

Æ ↑, 28 mm., 9.32 g.

THYATIRA.

1. Head of Apollo r., laur., hair long.

Bipennis: i. f. $\rightarrow \begin{matrix} \Theta\text{ΥATEI} \\ \text{PH NΩN} \end{matrix}$, to r. palm-leaf.

Æ ↑, 16.5 mm., 3.82 g. (Godwyn)

The occurrence of symbols on coins of this series does not seem to have been noted, though Imhoof published one with a monogram (*Lyd. Stadtm.* 148/6).

Vespasian.

2. $\Sigma\text{OV}\Sigma\text{PACIANOC} \ \Sigma\text{KAICAPCEBACTOC}$ Head r., laur.

ΘΥΑΤΕΙ ΦΗΝΩΝ Tetrastyle temple-front.

Æ ↑, 19.5 mm., 5.14 g. (New College)

Sept. Severus.

3. [Ϝ] ΞΕΥΗΡΟC Head r., laur.

ΘΥ ΑΤΕΙ ΞΡ ΗΝΩΝ Hekate advancing r., head l., wearing short chiton, crescent behind shoulders, holding in each hand torch, in r. lowered, in l. raised.

Æ ↓, 24 mm., 6.25 g. (New College)

Philip II.

4. ΜΙΟΝΑ ΞΦΙΛΙΠΠΟC Bust r., bare-headed, wearing cuirass and cloak.


ΘΥΑΤΕ Ι ΞΡΗΝΩΝ Athene seated l. on cuirass, wearing helmet, long chiton, peplos, and aegis, holding on r. palladium, resting l. on spear, by which shield.

Æ ↓, 24 mm., 5.96 g. (Nicolaidēs)

TRALLES.

1. Head of Zeus r., laur.

Bull walking l.: ab. →ΤΡΑΛΛ[Ι] bel. →ΑΝΩ[Ν],

i. f. r. 

Æ ↑, 15.5 mm., 3.07 g. (Fayūm, 1906)

Found in a hoard of Roman coins of about 350 A.D.

2. ΞΕΡΟC ΞΔΗΜΟC Bust r., youthful, draped.

ΩΤΡΑΛΛΙΑΝΩΝ Wreath of oak, tied below: in it, five pellets.

Æ ↓, 22 mm., 3.87 g. (Nicolaidēs)

Second quarter of third century A.D.: cf. *B.M.C. Lydia* 353/163.

Geta.

3. ΚΠΟ ΞC-ΓΕΤΑC Bust r., bare-headed, wearing cuirass and cloak, back view.

↗ΤΡΑΛΛΙ (ex.) →ΑΝΩΝ Humped bull standing r.

Æ ↓, 17 mm., 2.64 g. (New College)

Gallienus.

4. ΣΠΟΙΚΙΝΝΙ ΣΓΑΛΛΗΝΟΕΚ Bust r., laur., wearing cuirass and cloak, back view.

ΣΕΠΙΓΡΚΑΜΕΝΙΠΠ ΣΟΥΚΕΝΤΡΑΛΛΙΑ (ins.) ΣΝΩΝ Tyche standing l., crowned with modius, wearing long chiton and peplos, holding in r. rudder, in l. cornucopiae.

Æ ↓, 28.5 mm., 7.47 g.

5. ΟΠ--ΙΚΙΝΓ ΑΛΛΗΗΝΟΕΚ Bust r., laur., wearing cuirass and cloak, back view. [Round countermark, Σ.]

~ΤΡΑΛΛΙ Α (ex.) → ΝΩΝ Lion couched r.

Æ ↓, 21 mm., 3.98 g. (Jerusalem)

This differs from the description of Inv. Waddington 5462, "lion allant".

TRIPOLIS.

1. ΣΔΗΜΟC Head r., youthful, bare.

~ΤΡΙΠΟΛΕΙ (ex.) → ΤΩΝ River-god reclining l., himation over legs, holding in r. reed, in l. cornucopiae: under l. elbow inverted vase, with water flowing from it.

Æ ↓, 26.5 mm., 8.78 g. (Nicolaidēs)

Probably Inv. Waddington 2667. Early third century A.D.

2. Head of Herakles r., bearded, bare: b. d.

ΣΤΡΙΠΟΛΕΙ ΣΙ ΤΩΝ Nemesis standing l., winged, wearing long chiton, r. hand raised to neck, bridle in l.

Æ ↓, 17.5 mm., 3.30 g. (Nicolaidēs)

Third quarter of second century A.D.

Gordian III.

3. ΣΑΥΚΜΑΝ ΣΓΟΡΔΙΑΝΟC Bust r., laur., wearing cuirass and cloak.

ΣΤΡΙΠΟΛΕΙΤ ΣΩ Ν (ex.) → ΜΑΙΑΝΔΡ|ΟC River-god reclining l., himation over legs, holding in r. reed, in l. cornucopiae: under l. elbow inverted vase, with water flowing from it.

Æ ↑, 30.5 mm., 12.28 g.

Decius.

4. $\zeta\text{AK}\Gamma\text{MK}\ \text{D}\Delta\text{EKICTPA} \text{--- OC}$ Bust r., laur., wearing cuirass and cloak. [Round countermark, Λ in wreath.]
 $\zeta\text{TPIP}\text{O}\ \text{D}\Lambda\text{EIT}\Omega\text{N}$ Leto running r., head l., wearing long chiton and peplos, bearing a child on either arm.
 Æ ↓, 35.5 mm., 17.55 g. [Pl. IX. 7]

J. G. MILNE.

XI.

"CONCORDIA" *SOLIDI* STRUCK AT CONSTANTINOPLE BY THEODOSIUS I.

[SEE PLATES X-XII.]

THERE were two series of *solidi* struck at Constantinople with reverse legend commemorating "The Harmony of the Augusti"; one with obverse bust "diademed, draped, and cuirassed, r.", the other with obverse bust "helmeted and cuirassed, facing". In a recent article (*Num. Chron.*, 1938, p. 243) I have given my reasons for thinking that the latter is not only post-Theodosius I but also, with the "three Augusti" legend, post-Arcadius, and I confine the following notes to the first series alone. As this comprises virtually the whole of Theodosius's gold coinage from his own eastern mints between the date of his accession in January 379 and the outbreak of the war with Maximus in 388, the total output must have been great and specimens are by no means rare. From many public and private collections I can here, by the kindness of their custodians or owners, bring together the evidence of nearly 230 coins.

The reverse type is throughout that of "Constantinople seated facing, head turned r., upon a throne; her r. foot placed upon a prow. In her r. hand she holds a sceptre, the lower end of which is hidden by the prow." Varying details are: (1) her l. hand holds either a globe or a shield inscribed with *vota* figures. It will be seen that this variation does not denote two separate issues, but two parts of the same issue, the *vota* being reserved to the eastern emperors, Theodo-

sus and Arcadius, while the western emperors, Gratian and Valentinian II have only the coins without *vota*. (2) Constantinople is represented—in one issue only—as turreted or—in all subsequent issues—as helmeted. (3) Her throne in the “Constantinople helmeted” issues is either ornamented with lions’ heads or left plain. As the “plain throne” is found in combination with the higher *vota*-numbers, it clearly is later than the “ornamented throne”.

The legend indicates the number of Augusti recognized at the time of striking as either three or four. With the “four Augusti” legend are found Gratian, Valentinian II, Theodosius, and Arcadius; with the “three Augusti” legend, (a) divided **CONCOR-DIA** Gratian, Valentinian II, and Theodosius, (b) divided **CONCORDI-A** Valentinian II, Theodosius, and Arcadius.

Lastly, after the first two issues, viz. the “turreted” and the earliest of the “helmeted”, a Greek officina letter, A to I, is regularly added at the end of the reverse legend. It will be seen that in the doubled issues mentioned above there is a strict differentiation of *officinae* between those striking and those not striking *vota*-coins. This differentiation, however, is by no means the same in the earlier and in the later group.

It is easy, then, to establish the sequence of these issues. Their precise dating is another matter. We can fix beyond doubt the coinage immediately preceding and that immediately succeeding the death of Gratian, but beyond this we must be guided by considerations which may not appeal equally to all numismatists.

The issues, with the number of specimens noted for

each emperor, are as follows. (Only the varying details of the reverse type are given):—

Three emperors: Gratian, Valentinian II, and Theodosius.

- I. *Rev.* CONCOR-DIA AVGGG Constantinople is turreted and holds globe. The throne, in contrast to all the following issues, has a heavy framework.

M.m. CONOB

Obv. (1) DN GRATIA-NVS PF AVG Bust pearl-diademed only.

(2) DN THEODO-SIVS PF AVG Bust pearl-diademed only.

This issue does not seem to have been struck in the name of Valentinian II. Specimens noted are:—

Gratian 3 [Pl. X. 1]. Theodosius 11 [Pl. X. 2].

The portraiture is more in touch with that seen on the latest *siliquae* of Valens (with m.m. CONCM and CNCM) than with that of the following *Concordia* issues.

- II. *Rev.* CONCOR-DIA AVGGG Constantinople is helmeted and holds globe. The throne is ornamented with lions' heads. M.m. CONOB

Obv. (1) DN GRATIA-NVS PF AVG Bust both pearl- and rosette-diademed.

(2) DN VALENTINI-ANVS IVN PF AVG Bust rosette-diademed only.

(3) DN THEODO-SIVS PF AVG Bust rosette-diademed only.

This is the only issue in which Valentinian II is styled IVN. There is a marked change in the portraiture, which now becomes more idealized. All the emperors are represented with curls, which are not seen in any of my specimens of issue I.

Gratian p.d. (pearl-diademed) 1 [Pl. X. 3], r.d. (rosette diademed) 3 [Pl. X. 4]. Valentinian II r.d. 6 [Pl. X. 5] Theodosius r.d. 6 [Pl. X. 6].

From now onward an *officina* letter is added at the end of the reverse legend.

- III. *Rev.* **CONCOR-DIA AVGGG** + *officina* letter. Constantinople is helmeted and holds globe. The throne is ornamented with lions' heads.
M.m. **CONOB**

- Obv.* (1) **DN GRATIA-NVS PF AVG** Bust rosette-diademed only.
(2) **DN VALENTINI-ANVS PF AVG** Bust rosette-diademed only.
(3) **DN THEODO-SIVS PF AVG** Bust both pearl- and rosette-diademed.
(4) **DN ARCAD-VS PF AVG** Bust pearl-diademed only.

Gratian r.d. 10 [Pl. X. 7, 8]. Valentinian II r.d. 2 [Pl. X. 9]. Theodosius p.d. 1 [Pl. X. 10], r.d. 18 [Pl. X. 11]. Arcadius p.d. 2 [Pl. X. 12].

Though the legend mentions only three Augusti, yet four are represented in this issue. Arcadius has a very small bust, though not so small as on some of his coins in the next issue. Unless his two coins are hybrids, they must have been struck immediately on his accession, before the appropriate change in the legend was made. The distribution of emperors among *officinae*¹ is:—

	A	B	Γ	Δ	€	S	S•	Z	Σ	H	Θ	I
Grat. r.d.			2	2	1		1		2	1		1
Val. II r.d.		1					1					
Theod. p.d.					1							
" r.d.	5	1			4	1		1		1	3	1
Arcad. p.d.		1									1	

The Theodosius of Pl. X. 11, with its strange € (C) suggesting a fourth G with included €, has obverse

¹ Sometimes there is a dot following the *officina* letter. I give it only when it seems clearly not to be a mere embellishment of the end of the exergual line.

identity with a coin showing . . . **AVGGGA**. *Officinae* B, Z, and H also share an identical obverse.

Four emperors: Gratian, Valentinian II, Theodosius, and Arcadius.

IV A. *Rev.* **CONCORDI-A AVGGGG** + *officina* letter.
Constantinople is helmeted and holds globe.
The throne is ornamented with lions' heads.
M.m. **CONOB**

- Obv.* (1) **DN GRATIA-NVS PF AVG** Bust both
pearl- and rosette-diademed.
(2) **DN VALENTINI-ANVS PF AVG** Bust
both pearl- and rosette-diademed.
(3) **DN THEODO-SIVS PF AVG** Bust
rosette-diademed only.
(4) **DN ARCADI-VS PF AVG** Bust both
pearl- and rosette-diademed.

Gratian p.d. 2,² r.d. 4 [Pl. X. 13]. Valentinian II p.d. 3
[Pl. X. 14], r.d. 5 [Pl. XI. 1]. Theodosius r.d. 1
[Pl. XI. 2]. Arcadius p.d. 4 [Pl. XI. 3, 4], r.d. 10
[Pl. XI. 5, 6, 7].

IV B. *Rev.* **CONCORDI-A AVGGGG** + *officina* letter.
Constantinople is helmeted and holds shield
inscribed **VOT | V | MVL | X** The throne
is ornamented with lions' heads. M.m.
CONOB

- Obv.* (1) **DN THEODO-SIVS PF AVG** Bust both
pearl- and rosette-diademed.
(2) **DN ARCADI-VS PF AVG** Bust both
pearl- and rosette-diademed.

Theodosius p.d. 2 [Pl. XI. 9], r.d. 7 [Pl. XI. 10]. Arca-
dius p.d. 2 [Pl. XI. 11], r.d. 3 [Pl. XI. 12].

The distribution of emperors among *officinae* in IV A
and IV B is:—

² Illustrated in *Trans. of Int. Num. Congress 1936*, Pl. XIX. 1.
The identical obverse with change of name is used for Theodosius
(*ibid.*, Pl. XIX. 2, 3) in issues IV B and V B.

IV A.		€ S Z > H Θ I						
Grat. p.d.		1	1					
„ r.d.		1	1	2				
Val. II p.d.		1			1		1	
„ r.d.		1			2	1	1	
Theod. r.d.			1					
Arcad. p.d.		2	1		1			
„ r.d.		1	1	2		3	2	
IV B.		A	B	Γ	Δ			
Theod. p.d.		1		1				
„ r.d.		1	2	1	3			
Arcad. p.d.		1		1				
„ r.d.		2		1				

We could not wish for a clearer demonstration that IV A and IV B are contemporaneous and complementary. The differentiation of *officinae* is very strict and in marked contrast both to their irregular distribution in our earlier issue III and to their regular but very different distribution in the later "plain throne" issues. I have not met with any exception to the scheme set out above, and the continuation of the issue after Gratian's death carries it on unchanged.

Mr. Hugh Goodacre, in his paper "Byzantine Studies",³ suggests that there is evidence for a second "four Augusti" issue struck on the recognition of Maximus by Theodosius. There might well have been such an issue, as Theodosius certainly struck his Æ2 VIRTVS E-XERCITI in the name of Maximus side by side with those of the legitimate emperors. But the Arcadius "Tolstoi 19" [Pl. XI. 7] is not from the hand of a regular Constantinopolitan artist; and this is the coin on which, from the mature portrait of the obverse, Mr. Goodacre bases his suggestion. A better support, perhaps, for his view is the coin illustrated in

Pl. XI. 4, where the portrait is in striking contrast with that of Pl. XI. 5. But in the absence of further evidence in favour of a second "four Augusti" issue I am forced to regard this as only an extreme example of the liberty of the artist to represent a boy-emperor as at any stage of youthful growth he chose.

The coin of Maximus himself [Pl. XI. 8] seems to show an alteration from an earlier name and must be disregarded.

The strict system of differentiation of *officinae*, illustrated above, into which all examples of the "four Augusti" coins known to me fit, is a strong argument against a later issue, though not, of course, a decisive one. I shall revert briefly to this question later in my paper, when the whole evidence is before us.

Three emperors: Valentinian II, Theodosius, and Arcadius.

V A. Rev. CONCORDI-A AVGGG + *officina* letter. Constantinople is helmeted and holds globe. The throne is ornamented with lions' heads. M.m. CONOB

Obv. (1) DN VALENTINI-ANVS PF AVG Bust both pearl- and rosette-diademed.

(2) DN ARCADI-VS PF AVG Bust both pearl- and rosette-diademed.

Valentinian II p.d. 5 [Pl. XI. 13], r.d. 6 [Pl. XI. 14].
Arcadius p.d. 7 [Pl. XII. 1, 2], r.d. 11 [Pl. XII. 3].

V B. Rev. CONCORDI-A AVGGG + *officina* letter. Constantinople is helmeted and holds shield inscribed VOT | V | MVL | X The throne is ornamented with lions' heads. M.m. CONOB

Obv. DN THEODO-SIVS PF AVG Bust both pearl- and rosette-diademed.

Theodosius p.d. 2 [Pl. XII. 4], r.d. 14 [Pl. XII. 5].

The distribution of emperors among *officinae* in V_A and V_B is:—

V _A .		€	S	Z	Y	H	Θ	I
Val. II. p.d.		1		2	1			1
„ r.d.	1	1		2		1		1
Arcad. p.d.	2	2				1	1	1
„ r.d.	1	2		1	2	1		4

V _B .	A	B	Γ	Δ
Theod. p.d.	1	1		
„ r.d.	3	6	5	

We must have here the immediate continuation of IV_A and IV_B after the news of Gratian's death reached Constantinople. Not only does the identical system of differentiation of *officinae* suggest this, but a portrait of Gratian in IV_A, appearing identically, but with change of name, for Theodosius in IV_B, is carried on, with no sign of wear in the die, to V_B. The three coins were illustrated in the *Proceedings* of our Congress, Pl. XIX. 1, 2, 3, and their possible historical significance suggested on p. 230.

The evidence seems clear that IV_A and B and V_A and B together represent the coinage of the whole year from January 19, 383 to January 18, 384, when Theodosius completed his first *quinquennium*. The fact that the coinage of the last four months of the year actually outnumbers that of the first eight months in my specimens points to an exceptionally intensive output following upon Gratian's death and, as we are able to date these issues with unusual precision, they have unusual importance as historical evidence. The quinquennial donatives to the soldiery necessitated large issues of gold, but these, our authorities tell us, were distributed at the beginning of the final quinquennial

year and the bulk of the coinage under discussion comes at the end. We know—and the fact is preserved for us by the coinage alone—that on the death of Gratian Theodosius occupied western and eastern Illyricum. This, though ignored by historians, must surely point to a suspicion of Maximus's intentions, and the heavy coinage of this time may be an indication of Theodosius's preparations to meet a possible war.

We come now to the final issue, or issues, of gold by Theodosius I from Constantinople. We find a small, but marked, difference in the type. Constantinople's throne is no longer ornamented with lions' heads, but is left plain. There is still the same reservation of *vota*-coins to the eastern emperors, with a parallel issue without *vota* for Valentinian II; the distinction being carried out with still greater strictness than in the earlier *vota*-series, for I have not met with a single exception. Also, Valentinian II is very scantily represented, while Theodosius, with *vota* X-XV, and Arcadius, with *vota* V-X, are both largely represented. Although I do not think that these two sets of *vota*-coins were strictly contemporary, yet it will be seen that they, with the fewer coins of Valentinian II, agree in a single system of distribution by *officinae*. As the coins of Valentinian II are uniform in type and the portraits offer us no certain means of distinguishing between an earlier and a later issue—assuming that there were two issues, matching the two *vota*-issues—it is convenient to take all this later group together.

VI A. Rev. CONCORDI-A AVGGG + *officina* letter. Constantinople is helmeted and holds globe.
The throne is plain. M.m. CONOB

Obv. DN VALENTINI-ANVS PF AVG Bust both
pearl- and rosette-diademed.

Valentinian II p.d. 2 [Pl. XII. 6], r.d. 7 [Pl. XII. 7].

VI B. *Rev.* CONCORDI-A AVGGG+ *officina* letter. Constantinople is helmeted and holds shield inscribed VOT | V | MVL | X. The throne is plain. M.m. CONOB

Obv. (1) DN THEODO-SIVS PF AVG Bust both
pearl- and rosette-diademed.

(2) DN ARCADI-VS PF AVG Bust rosette-
diademed only.

Theodosius p.d. 3 [Pl. XII. 8], r.d. 3 [Pl. XII. 9].
Arcadius r.d. 21 [Pl. XII. 10].

VI c. *Rev.* CONCORDI-A AVGGG+ *officina* letter. Constantinople is helmeted and holds shield inscribed VOT | X | MVL | XV. The throne is plain. M.m. CONOB

Obv. (1) DN THEODO-SIVS PF AVG Bust both
pearl- and rosette-diademed.

(2) DN ARCADI-VS PF AVG Bust both
pearl- and rosette-diademed.

Theodosius p.d. 16 [Pl. XII. 11], r.d. 14 [Pl. XII. 12].
Arcadius p.d. 1 [Pl. XII. 13], r.d. 6 [Pl. XII. 14].

The distribution of emperors among *officinae* in VI A,
VI B, and VI c is:—

VI A.

€ S
Val. II p.d. 2
,, r.d. 3 4

VI B.

	A	B	Γ	Δ	Z	Σ	H	Θ	I
Theod. p.d.			1	1				1	
„ r.d.	2	1							
Arcad. r.d.	3			3		1	6	3	3

VI c.

Theod. p.d.	2	2	4					6	2
„ r.d.	4	2	4					3	1
Arcad. p.d.								1	
„ r.d.	1		1		1			3	

In VIc a reverse identity links a pearl-diademed with a rosette-diademed portrait of Theodosius. No help towards a relative dating can be got from the state of the die, which seems unworn in both coins. For our purposes they may be regarded as virtually contemporaneous. If there was any distinction in the ceremonial use of the two diadems, it has no bearing, so far as I can see, on their use on the coins.

With the exception of a single specimen of Arcadius in *officina* S, all the coins in VI A, B, and C conform to a scheme by which the *officinae* E and S are reserved to Valentinian II, the other *officinae* to Theodosius and Arcadius, and so may be regarded as a closely connected group. There is also great uniformity in the portraiture of Theodosius in VI B and VI C. But that of Arcadius, while still "boyish" in many specimens in VI B, is never younger than "youthful" in any specimen I have seen for him in VI C, which on that account alone I must regard as in part, at least, the later. The total absence of *officinae* Z and H on my specimens of the VI C issue may also point to a later period in which these were out of commission, but is, I think, more likely to be accidental. The date at which VI A, VI B, and VI C could all come under the same system of mint organization, with VI C overlapping or following closely on VI B is, of course, suggested by the respective *vota*-figures of Theodosius and Arcadius. Arcadius's V-X would naturally be struck from 19 January 387, onwards till 18 January 388, and, similarly, Theodosius's X-XV from 19 January 388, onwards. It seems, indeed, quite likely that Theodosius would hurry on his own issue on learning the alarming

news of Maximus's invasion of Italy, and that both issues fall in the year 387.

At this point the gold coinage of Theodosius at his own eastern mint stops and its continuation must be sought in mints of the western empire.

I have two coins of the issue VI c which show irregularities due to the carelessness of the die-engravers. One is of Theodosius, *obv.* rosette-diademed, with *rev.* legend **CONCORDI-A AVGGA**; the other of Arcadius, *obv.* rosette-diademed, with *rev.* legend correctly **CONCORDI-A AVGGGA**, but with shield inscribed **VOT | V | MVLT | XV** Both are perfectly legitimate coins.

The evidence summarized above is enough, I think, to determine the order of the issues and the respective representation of the emperors in each. We see a marked predominance of the eastern emperors over their western colleagues who were their seniors in rank. (This is in striking contrast to the procedure of Gratian, seen in the Treveran *siliquae*, which after the death of Valentinian I were struck by him in far greater numbers for Valens, now Senior Augustus, than in his own name.) Valentinian II seems to be entirely ignored in issue I, and is very scantily recognized in III. Throughout IV and V he has a fair representation, but again recedes into the background in the last issues. Neither he nor Gratian shares in the coins with *vota*, which is the more surprising, as in the rare *siliqua* **VOT | X | MVLT | XX CONS.**, struck after Gratian's death, he shares equally with his eastern colleagues. My numbers for this are: Valentinian II p.d. 2; r.d. 2, Theodosius p.d. 2; r.d. 2, Arcadius p.d. 2; r.d. 1. From the portraits I should

judge these to be contemporary with our issue VI, as the *vota*-numbers themselves suggest. I can offer no explanation of this inconsistency, for in the rest of the coinage from the very first the House of Theodosius is certainly more prominent than the House of Valentinian I, on whose ruins it was to rise. The contemporary issue of Gratian's *solidus* VICTOR-IA AVGG at Treveri shows us very different figures. It began before the death of Valens, so that presumably some of the coins of Gratian and Valentinian II were struck before Theodosius's elevation, yet, even so, Theodosius has in my collection of casts thirteen specimens to three of Valens, twelve of Gratian, and sixteen of Valentinian II.

Can we find a place in our scheme for the second "four Augusti" issue (including Maximus), which Mr. Goodacre suggests? I have chosen for illustration the portraits of Arcadius which would best support this suggestion. Such an issue could only come after V which is the continuation of IV, and which ends with the completion of Theodosius's *vota* V-X, and before VI with its changed form of throne, which celebrates (in VI B) the completion of Arcadius's *vota* V-X. No *vota*-coins, then, can be claimed for the presumed second "four Augusti" issue, and the evidence for it must be sought among the coins we have placed above in IV A. These, as we have seen, all come from the *officinae* € to I, and it would be at least strange that *officinae* A to Δ should remain permanently closed until issue VI, when they reappear.

The *entente* with Maximus began in the later part of 384 and, from the extreme rarity of his coins in the Æ2 VIRTVS E-XERCITI issue, does not seem to have been

long-lived. If it had lasted until Maximus's invasion of Italy in 387, Arcadius would then have been only ten years of age, and, even supposing that Theodosius had struck up to the end of 386, immediately after which our issue VI B must be placed, the more mature portraits of Arcadius in IV A, on which the suggestion of the second "four-Augusti" issue is based, are hardly more appropriate as "likenesses" of a boy of nine, than of a boy of six.

The closer a coin can be dated, the greater is its potential value as a historical document. Of our six issues IV and V seem beyond question to fill the year between 19 January 383 and 18 January 384. Issue VI can be dated by its *vota*-figures within certain limits, although there may not yet be a general agreement as to the precise nature of those limits. But I, II, and III are by their legend suitable to any portion of the reign of Theodosius at which there were three recognized Augusti. Only the sifting of much evidence enables us to place them as suggested above: they represent the issues of *solidi* at Constantinople from the beginning of Theodosius's reign to the accession of Arcadius.

Eminent numismatists have laid down rules which, if they can be proved to be valid, would render the dating of *solidi* of the Theodosian period a very simple matter. One is that they were struck mainly for purposes of largesse to the soldiery at the quinquennial festivals. Another is that they were struck only by a travelling mint which accompanied the emperor, so that the combination of date and place in his Rescripts would also give us the date of the issue marked with the name or other indication of that place. But these assertions, while probably containing a good deal of

truth, do not, I think, contain the whole truth. Applying them to our present inquiry, we should have to date issue I after the arrival of Theodosius at Constantinople in November 380, and then find three distinct occasions on which largesses would be felt by him to be appropriate. As I am unable to do this with any confidence, I prefer to regard issues I, II, and III as struck to supply the ordinary needs of a gold currency for whatever purposes, and to suggest a provisional dating on the evidence offered by the coins themselves. The portraiture of I leads me to place it quite early in the reign. The legend, the 'Harmony of the three Augusti' is that struck from the first by Gratian's own mints with the type of "Constantinople" on *siliquae* and $\text{Æ}3$ in the name of Theodosius. I am inclined, then, to take it as a heartening message to all the subjects of the Empire at the inauguration of the new reign.

By the time issue II was struck, new influences had been at work in the mint of Constantinople. The portraiture is more uniform, more idealized, and all the three emperors are represented with curls. The IVN in Valentinian II's style occurs in Theodosius's mints only in this *Concordia* issue II from Constantinople, on the *AV solidus* VICTORIA AVGVSTORVM "Victory seated r. holding shield inscribed VOT | V" and the $\text{Æ}3$ VRBS ROMA from Antioch, and on the $\text{Æ}3$ VRBS ROMA from Nicomedia. This $\text{Æ}3$ type is, of course, a western one, and it is combined at Antioch and Nicomedia with two other $\text{Æ}3$ western types, VIRTVS ROMANORVM for Gratian and the variety of CONCORDIA AVGGG in which Constantinople is seated with hand on knee for Theodosius. I suggest that this

"western" addition of IVN gives us a common date for the coins on which it appears. The eastern mints are striking under western direction, and Theodosius has not yet begun to strike his own typical eastern issues. The limit of date may be inferred, perhaps, from the *vota* of Valentinian II, as between November 379 and November 380, when he would complete his first quinquennium.

Our issue III is the first to mark the *officinae* by the addition to the legend of a Greek letter, which henceforth is the rule. The inclusion of a fourth emperor, Arcadius, under a "three Augusti" legend shows that it comes close up to IV, which has the legend corrected to suit the accession of the fourth Augustus. As the two coins of Arcadius, with one of Theodosius, alone show a pearl-diadem, while eighteen of Theodosius, the ten of Gratian, and the two of Valentinian II all have rosette-diadem, it may well be that we have more than a single issue in III. However, at present I can see no possibility of proving this, and we know that both forms of diadem appear in another issue with identical reverse and so may be regarded as virtually contemporaneous. It seems safe to date issue III to 382.

My thanks are due to the editors of the *Numismatic Chronicle* for the generous allowance of plates which has made it possible for me to illustrate this paper with some fullness. Thus I have been able to show side by side the extremes in the portraiture of Arcadius which represent him as of decidedly different ages and so—if viewed apart from other and purely numismatic considerations—would certainly justify a belief in a diversity of issues. In my arrangement

of the issues I have been guided by the "other considerations". Anyhow, I hope the evidence brought forward in this paper will be helpful to fellow numismatists in forming their own judgement.

J. W. E. PEARCE.

XII.

ROMAN IMPERIAL COINS IN THE OXFORD COLLECTION.

(I) AUGUSTUS TO VITELLIUS.

[SEE PLATE XIII.]

IN his "Notes on the Oxford Collections" Dr. J. G. Milne has already begun to list those major varieties of Greek coins in the Ashmolean Museum which are not included in the more important of the standard reference-books. The following lists are designed to do the same (though to a smaller degree) for the Roman Imperial coins in the Ashmolean. The coins described are those not included in H. Mattingly-E. A. Sydenham, *The Roman Imperial Coinage*, or in H. Mattingly, *Coins of the Roman Empire in the British Museum*. Primary reference to pieces described in sale-catalogues has not been made: the task which confronts the compilers of the ideal *corpus* of the future must, if possible, be helped by a refinement of the material, and not hindered by its perpetual distillation.

The borders of the coins are dotted unless it is expressly stated otherwise.

AUGUSTUS.

1. *Obv.* IMP CAESAR Bare head, r.

Rev. C•A in wreath of laurel leaves and prowls: linear border.

Æ Dp. ↑ 26 mm., 11.57 gm. (J. G. Milne [Sotheby 28:xi:1911, lot 333]).

After *R.I.C.* 49; cf. *B.M.C.* 721 ff.

2. Types as *R.I.C.* 234 (head r.), but **CAESAR·AVGV·CTRIB·POTEST·**

Æ As. ↓ 26 mm., 5.35 gm.

Cf. *B.M.C.* i, p. 54, note *.

3. *Obv.* **·S·P·Q·R·CAESARI AVGVSTO** Bare head, r. : linear border.

Rev. **QVO·D·VIAE·MVN·SVNT·** Augustus, crowned by Victory, driving biga of elephants r., on double arch flanked on either side by roofed arcade : linear border.

Æ ↓ 21 mm., 7.86 gm. (Ashmole).

[Pl. XIII. 1.]

After *R.I.C.* 316. The division of the reverse legend is curious.

4. (Tiberius).

Obv. **OTICAESARAVGVSTFIMPERATVI** Head r., laur.

Rev. → **ROMETAV[G]** in exergue, below the Altar of Lugdunum.

Æ As. ↑ 25 mm., 9.55 gm. [Pl. XIII. 2.]

After *R.I.C.* i, p. 91, no. 368. *Imp. VI* (= A.D. 11) is an imperialior dating hitherto suspect (cf. *B.M.C.* i, p. 95, note to no. 578). But the reading on the present coin (the style of which is parallel to that of the remainder of the class) is a certainty.

CALIGULA.

5. Types as *R.I.C.* 14, but with **COT·** for **COS·** on the obverse.

Æ ↓ 19.5 mm., 7.75 gm. (Kemble College).

Legend blundered, with **COS·** following on **POT·**

CLAUDIUS.

6. *Obv.* **OTICAESARAVGVST[FIMPERAT—]**
Head of Tiberius r., laur.

Rev. **SC** on either side of Minerva, armed, advancing r., as *R.I.C.* (Claudius) 66.

Æ As. ↓ 23 mm., 4.97 gm. (Kemble College).

[Pl. XIII. 3.]

A Claudius-Tiberius mule, possibly irregular in origin (the weight is very low) and struck by an illicit combination of two old but official dies.

NERO.

7. Types as *R.I.C.* 245, but reverse QPON MAT RPIMPPP: exergue, → S C

Æ Semis. ↓ 19.5 mm., 4.11 gm.

Probably of the mint of Rome.

8. *Obv.* QNEROCLAVDCAESARAVGGERMA

Head r., laur. (globe).

Rev. ϚPONTIFMAX ϚTRPOTIMPPP: exergue, → S C Roma seated l. on cuirass, holding wreath and parazonium.

Æ Semis. ↓ 21.5 mm., 4.70 gm. (Corpus Christi College).

After *R.I.C.* 260. Mint of Lugdunum.

9. *Obv.* QIMPNEROCAESARAVGPMTRPPP

Head r., laur. (globe).

Rev. ϚSECVRITAS ϚAVGVSTI: exergue, → S C Securitas seated r. on high-backed chair before altar and torch: she supports her head with r. hand and holds sceptre in l.

Æ Dp. ↓ 30 mm., 12.85 gm.

[Pl. XIII. 4.]

Cf. *B.M.C.* 338 ff.; *R.I.C.* 284 ff. Mint of Lugdunum.

10. *Obv.* QNEROCLAVDC[A]ESARAVGGERMPM-TRPIMPPP Head l., rad.

Rev. Ϛ[SECVRITA]S ϚAVGVSTI: i. f., l. and r., [S] C

Type as no. 9 above.

Æ Dp. ↓ 30.5 mm., 14.66 gm. (Kemble College).

See *R.I.C.* 284 ff.; *B.M.C.* 212 ff. Mint of Rome.

11. Types as *R.I.C.* 292, but reverse, SECVRTAS (*sic*)
 NAVGVSTI &c., and type as no. 9 above.

Æ Dp. ↓ 29 mm., 13.00 gm. (Kemble College).

Mint of Rome: small lettering, neat style.
 The Sydenham example cited in *R.I.C.* reads
 SECVRTAS.

12. Types as *R.I.C.* 312 (rad. r.), but obverse, legend A,
 CLAVDIVS GER.

Æ Dp. (a) ↓ 27.5 mm., 11.37 gm. (New
 College). [Pl. XIII. 5.]

(b) ↓ 27.5 mm., 14.35 gm. (Raw-
 linson).

Mint of Rome.

13. Types as *R.I.C.* 378, but reverse, no S.

Æ Semis (orich.). ↓ 18.5 mm., 3.32 gm.
 (Douce).

? Mint of Lugdunum.

14. The Oxford coin cited as *R.I.C.* 381 has no S on
 reverse.

Æ Semis (orich.). ↓ 18.5 mm., 3.59 gm.
 (Douce).

Mint of Rome.

15. *Obv.* NEROCAES NAVGIMP Head r., laur.

Rev. QCERTQV INQROMC O : exergue, → S C
 Gaming table, &c., as on *R.I.C.* 376 ff.: mark
 of value, S, to r. of vase.

Æ Semis (orich.). ↓ 18.5 mm., 3.59 gm.

After *R.I.C.* 400. Mint of Rome.

16. Types as *R.I.C.* 405, but reverse, no S.

Æ Semis (orich.). ↓ 18.0 mm., 3.98 gm.
 (Douce).

Mint of Rome.

17. *Obv.* CNEROCL AVDCAESARAVG Type as *R.I.C.* 416 ff.

Rev. CPONM VTRPIMP: i. f., l. and r., S C Type as *R.I.C.* 416 ff.

Æ Quadr. (orich.). ↑ 14.5 mm., 2.57 gm. (Douce).

After *R.I.C.* 435. Mint of Rome.

CIVIL WARS.

18. (Gaul).

Obv. O[PAX] ET LIBERT[AS] Clasped hands holding winged caduceus.

Rev. Exergue, → [SIGNA]: i. f., l. and r., P R Eagle l., between two standards, with head above altar.

Æ Den. ↓ 17.5 mm., 3.00 gm. (Godwyn).

After *R.I.C.* 35. The restoration of SIGNA on the reverse is virtually certain by analogy.

GALBA.

19. Types as *R.I.C.* 7, but with obverse 1, V GALBA CIMP Head r., laur.

Æ Den. ↓ 18.5 mm., 3.46 gm. (Godwyn).
[Pl. XIII. 7.]

Mint of Rome.

20. Types as *R.I.C.* 20, but with obverse 2, CIMP SER V GALBA AVG Head r., bare.

Æ Den. Many examples in the Ashmolean, of c. 3.45 to 3.15 gm.

Doubtless omitted by accident from *R.I.C.*: see *B.M.C.* 34 (but 'bare head r.' for 'laur. head r.'). Mint of Rome.

21. Types as *R.I.C.* 35, but with obverse 23, CIMP SER SVLPIC GALBA VCAES AVG TR P (bust r., laur., dr.), and reverse, CLIBERAS (*sic*) PVBLICA, &c.

Æ Sest. ↓ 36 mm., 27.10 gm. (Douce).
[Pl. XIII. 6.]

See *B.M.C.* i, p. 319, note †. Mint of Rome.

22. Types as *R.I.C.* 50, but with obverse, $\text{S} \text{ER} \text{GALBA}$
 $\text{I} \text{M} \text{P} \text{CAESA} \text{VG}$ (*sic*). Bust l., laur., dr.

Æ Sest. \downarrow 36.5 mm., 26.07 gm. (Douce).
 [Pl. XIII. 9.]

Cf. *B.M.C.* 110. ? Mint of Rome.

23. Types as *R.I.C.* 59, but with obverse 15, $\text{I} \text{M} \text{P} \cdot \text{S} \text{ER} \cdot$
 $\text{G} \text{ALBA} \cdot \text{A} \text{VG} \cdot \text{TR} \text{P}$ Head l., laur.

Æ Dp. \downarrow 30 mm., 14.56 gm. (Kemble College).
 Mint of Rome.

24. Types as *R.I.C.* 60, but with obverse 8, $\text{S} \text{ER} \text{GAL} \cdot$
 $\text{B} \text{A} \text{I} \text{M} \text{P} \cdot \text{C} \text{AESAR} \cdot \text{A} \text{VG} \cdot \text{TR} \cdot \text{P}$ Head l., laur.

Æ As. \downarrow 27.5 mm., 9.90 gm. (Douce).

As *B.M.C.* i, p. 319, no. § (Hall Coll.). Gallic mint.

25. Types as *R.I.C.* 118, but with obverse, $\text{S} \text{ER} \cdot$
 $\text{G} \text{ALBA} \cdot \text{I} \text{M} \text{P} \cdot \text{C} \text{AESAR} [\cdot \text{-----}]$ Head r.,
 laur.: no globe.

Æ Den. \downarrow 17 mm., 3.19 gm. (Family of
 the late Peter Carruthers, 1937.) [Pl. XIII. 8.]

This coin, struck in the style of the Gallic series of A.D. 68-9, has a suspicious appearance: the planes of relief vary too sharply, and detail alternates with bareness too conspicuously. Doubts of its genuineness are reinforced by comparison of it with *B.M.C.* 225, and Plate 54, 21 thereto. The *B.M.* coin is from the same dies, and is identical in shape, exactly the same portions of the legends being off the flan. Moreover, though the head—in high relief—appears near the edge of the flan, the wreath is not rubbed naturally or consistently: the lower leaf of the third pair above the tie would not, through normal wear, be more worn than the upper leaf—as this coin represents it—for considerable wear on the obverse would certainly be expected in view of the much worn reverse, and the *outer* parts of the profile head would suffer most from this. There is, then, a strong case for the re-examination of the *B.M.* coin. Should doubts attach to this piece too, then the manufacture

of common dies for the two coins could be attributed, perhaps, to the late eighteenth or early nineteenth century, as the *B.M.* coin formed part of the George III Gift of 1823. (No trace of a globe below the neck appears on either coin, despite the catalogued details of *B.M.C.* 222 ff.)

VITELLIUS.

26. Types as *R.I.C.* 20, but with obverse 2, QAVITEL-
LIVS GERMIMPAVGPMTRP (bust r., laur.,
dr.), and reverse CCONCORDIA AVGVSTI,
&c.

Æ Dp. ↓ 31 mm., 13.80 gm. (Godwyn).
[Pl. XIII. 10.]

Cf. *B.M.C.* 65. Mint of Rome.

27. Types as *R.I.C.* 20, but with obverse 3, QAVITEL-
LIVS GERMAIMPAVGPMTRP (head r.,
laur.), and reverse CCONCORDIA AVGV-
VSTI, &c.

Æ Dp. ↓ 28 mm., 14.10 gm. (Douce).

Cf. *B.M.C.* 65. ? Mint of Lugdunum.

Note: (i) The following are specimens in the Ashmolean
of coins recorded in *B.M.C.* though omitted from *R.I.C.* :—

Augustus. *B.M.C.* 721. (a) ↑ 28 mm., 13.22 gm.

(b) ↑ 27 mm., 12.48 gm.

Galba. *B.M.C.* 131. ↓ 30 mm., 13.91 gm.
(Nourse).

B.M.C. 134. ↓ 28 mm., 14.40 gm. [Pub-
lished by Wise (*Cat.*, p.
61) in 1750.]

(ii) The following composite numbers in *R.I.C.*
should embrace supplementary details :—

Galba. *R.I.C.* 14 should include obverse 7 (= Coh. 200).

" 50 " " 6 (= Coh. 293).

" 52 " " 13 (= Coh. 17).

C. H. V. SUTHERLAND.

XIII.

SOME NEW COINS FROM KILWA.

SINCE the publication of the "History and Coinage of the Sultans of Kilwa" in *Num. Chron.*, 1936, the present writer has had an opportunity of examining three more hoards of Kilwa coins, which supplement the information previously recorded. The item of most importance is the presence in the first hoard of a coin of one of the Sultans of Kilwa hitherto unrepresented numismatically. For this reason it may be singled out and described here.

Obv. Within a square the following Arabic legend :

العادل	العدل al-Ādil
محمد	محمد Muḥammad
الظافر	السلطان the Sultan

Rev. Within a square the following Arabic legend :

الظافر	الظافر Conqueror
بمساعدة	بمساعدة by the help of
الرحمن	الرحمن the All-Merciful.

Æ .7; wt. 11 gr. (0.71 grm.).

The Arabic legends are in Naskhi script without diacritic points. The specimen from the hoard is worn

very thin and the bottom word on the obverse is practically obliterated. Fortunately another example, recently presented to the British Museum by the Chief Secretary of Tanganyika, verifies the reading given above. The full legend, as is the custom on all the coins of Kilwa already published, rhymes and is as follows:—

al-‘Ādil Muḥammad al-Sulṭān

al-Zāfir bi ta’yīd al-Raḥmān.

Its weight is 18 gr. (1.16 grm.).

Although the coin bears neither date nor mint indication, the Sultan's name and title are distinctive amongst the known rulers of Kilwa. He can be none other than Muḥammad ibn Sulaimān (no. 29 in the writer's published list of Sultans), whom the Portuguese chronicler Barros calls Mahamed Ladil. According to the Arabic Chronicle this Sultan was given this title *al-Malik al-‘Ādil* ("the Just King") as well as the sobriquet of *al-Maṭar al-Jadīd* ("the New Rain"). The Chronicle further tells us that "when he undertook the government everybody adhered to him and the great ones of state obeyed him". His reign was probably about A.H. 825-834 (A.D. 1421-1430). These new coins have the additional interest of bearing the title of *Sulṭān*. Although this is the regular designation of these rulers of Kilwa in the Arabic Chronicle, this is the only case where it occurs on their coinage.

The hoard, in which the above coin was found, was brought to this country by Lieut. C. S. Smith, Vice-Consul at Zanzibar in 1883-1886. Its composition was as follows:—

Kilwa Coins.

A.D.	Ruler	No.
c. 1302-1316	Sulaimān ibn al-Ḥasan . .	22
c. 1341-1364	Dā'ūd ibn Sulaimān . .	8
c. 1372-1374	Sulaimān ibn al-Ḥusain . .	1
c. 1421-1430	Muḥammad ibn Sulaimān . .	1
c. 1460	Dā'ūd ibn al-Ḥasan . .	3
c. 1480-1482	'Alī ibn al-Ḥasan . .	41
c. 1482-1493	al-Ḥasan ibn Sulaimān . .	41
	Uncertain Kilwa type . .	10
Total		<u>127</u>

Chinese coins also in the hoard.

1	cash of Chêng Ho period . .	A.D. 1111
1	„ Hsi Ning „ . .	A.D. 1068
1	„ „ „ (in seal character)	
1	„ Shun Hua period . .	A.D. 990-995

Another example of this new coinage of Sultan Muḥammad al-'Ādil [wt. 9.4 gr. (0.61 grm.)] was contained in the second hoard which we shall now describe. This small hoard which came from Kua Mafia was given to the late Sir Horace Byatt when he was Governor of Tanganyika Territory (1920-1924). Through the kindness of Lady Byatt the coins were sent for examination to the present writer and one or two specimens, including the above-mentioned coin, were selected for presentation to the British Museum. The following is an analysis of the contents of the hoard:—

Kilwa Coins.

A.D.	Ruler	No.
c. 1285-1302	al-Ḥasan ibn Ṭalūt . .	1
c. 1302-1316	Sulaimān ibn al-Ḥasan . .	20
c. 1341-1364	Da'ūd ibn Sulaimān . .	1
c. 1421-1430	Muḥammad al-'Adil . .	1
c. 1460	Da'ūd ibn al-Ḥasan . .	2
c. 1480-1482	'Alī ibn al-Ḥasan . .	38
c. 1482-1493	al-Ḥasan ibn Sulaimān . .	49
	Uncertain Kilwa type . .	2
Total		<u>114</u>

The hoard also contained a bronze coin of Muḥammad Khān, Mongol of Persia, struck at the mint of Shākān in A.H. 737 = A.D. 1336.

The third hoard of Kilwa coins had been the property of the late Major F. B. Pearce, the author of *Zanzibar: The Island Metropolis of Eastern Africa*. The coins were sent for examination through the courtesy of his nephew, Mr. Charles T. Pearce. The composition of the hoard was as follows:—

Kilwa Coins.

A.D.	Ruler	No.
c. 1302-1316	Sulaimān ibn al-Ḥasan . .	8
c. 1482-1493	al-Ḥasan ibn Sulaimān . .	1
?	al-Ḥusain ibn Aḥmad . .	9
?	Ishāk ibn Ḥasan . .	28
	Uncertain (of last two types) . .	17
Total		<u>63</u>

In addition there was also included a Chinese cash of the Emperor Shên Tsung, A.D. 1068-1086, of the Hsi Ning period (A.D. 1068) in seal character.¹

¹ This coin incidentally is of interest because the reverse die has been displaced and the impression does not correspond with the square hole in the flan.

The coin of al-Ḥasan ibn Sulaimān in the hoard has a special interest since it provides us with a variety of legend not recorded in the writer's previous article. Mr. Pearce has very kindly given it, together with one or two more varieties of Kilwa coins, to the National Collection. The coin legends are as follows:—

Obv. Within a circle:

الحسن بن al-Ḥasan son of
سليمان اعلى Sulaimān. May
الله امره Allah exalt his government!

Rev. Within a circle:

المعتمد على relying upon
الله المنان Allah the Bountiful.
عز He is glorious!

Since we are on the subject of Kilwa coinage it may be pointed out that Prince Philippe of Saxe Coburg illustrated² two coins of Kilwa which, unfortunately, he mistakenly attributed to the "Pirates Bédouins du Chatt El-'Arab de la tribu des Banou Ka'b'. The first is actually a coin of Sulaimān ibn al-Ḥasan (c. A.D. 1302–1316); the second one of 'Alī ibn al-Ḥasan (c. A.D. 1480–1482).

J. WALKER.

² *Revue Belge de Num.*, 1898, pp. 121–9.

MISCELLANEA.

THE COINAGE OF PROBUS AS A MODEL FOR RADIATE IMITATIONS.

AMONG the coins which Sir Arthur Evans has from time to time submitted for inspection at the Ashmolean Museum, two have recently proved to be of somewhat curious interest, and I have his kind permission to publish them here. The coins are of *aes*, and are struck from the same dies: their details are as follows:—

Obv. $\epsilon \text{ M} \text{ PROBVS} \text{ P}$ [————]. Head, radiate, r.: the forehead protruding, and the features small and emaciated (not unlike those of Claudius Gothicus): linear or dotted border.

Rev. No legend. Full-length figure, draped, standing r.: from the r. side of the body springs an adjunct shaped like the head of a shepherd's crook (U)—possibly a barbarous representation of the left arm: in the field, low left, an uncertain and disconnected stroke: coarse and disjointed dotted border.

(1) \downarrow 13.5 mm. 1.60 gm.

Obv. overstruck on an earlier *obv.* *Rev.* ill-centred, and the upper part of the type off the flan.

(2) \downarrow 13 mm. 1.35 gm.

Flan oval in shape. Nearly half the *rev.* type off the flan, including the upper part, as on no. (1).

These two coins were among a selection, coming originally from Richborough, which was submitted by Roach Smith to Sir John Evans, who retained them in his own collection, whence in time they passed to that of Sir Arthur.

It has been generally observed that radiate copies derive their portraiture (where it is at all recognizable) most commonly from the coins of the Tetrici, though the features of Victorinus and Claudius Gothicus are not infrequently imitated, and even Gallienus and Postumus occasionally provide a prototype.¹ In contrast to the period covered by

¹ Compare, e.g., H. Mattingly and W. P. D. Stebbing, "The Richborough Hoard of 'Radiates', 1931", in the *American*

the Gallic Empire, the years immediately following furnished a series of coin-portraits of which only the most sparing use was made as models for imitation: isolated examples of these derivatives are indeed uncommon enough to allow us to note them individually. The coinage issued during the period of the Gallic Empire was immense in volume,² and there is little doubt that this volume helped to set a very natural fashion in imitation; but the coinage of Carausius a few years later was by no means scanty, and yet his features seem hardly ever to have provided a model for imitation in definitely non-official style and size. These facts might easily suggest that the vast majority of radiate copies (and minims as well) found in Britain was produced simultaneously (or almost simultaneously) with the period of the Gallic Empire, as is held to have been the case in Gaul.³ But the evidence for Gaul is not necessarily the evidence for Britain, and (as I have pointed out elsewhere)⁴ a really extensive association of official with non-official coins in Britain in the years c. A.D. 260–273 has yet to be proved and illustrated by the hoards. Imitations of orthodox size there doubtless were in some numbers, and these numbers may have grown when Aurelian introduced his monetary reform: the new coins, at any rate, entered Britain very sparingly;⁵ they threatened to demonetize the “Gallic” *antoniniani*, a continued supply of which might easily be ensured by local production. For the *minimi* proper, however, the evidence in Britain has not yet suggested a date before c. A.D. 285:⁶ it may well have been that the consummation of Aurelian’s reform in Carausius’ own thorough monetary reconstruction (to which there could be little resistance) resulted in the final and inevitable depreciation of the “Gallic” pieces and their earlier copies to the level of local copper token-currency,

Numismatic Society’s *Notes and Monographs*, no. 80 (1938), p. 5; C. H. V. Sutherland, *Coinage and Currency in Roman Britain*, p. 126; T. V. Wheeler and B. H. St. J. O’Neil, “Radiated Coins from Verulamium Theatre”, *Num. Chron.*, 1937, p. 224 f.

² Note the composition of the Blackmoor hoard: Sutherland, *op. cit.*, p. 69.

³ See A. Blanchet, ‘Les monnaies barbares aux noms et types des deux Tetricus’, *Recueil du Congrès de Numismatique de Bruxelles*, 1910; cf. *Rev. Num.*, 1938, p. 119.

⁴ Sutherland, *op. cit.*, pp. 57 ff.

⁵ *Id.*, pp. 55, 69.

⁶ *Id.*, pp. 115 ff.

any further additions to which (on the same models) would be crudely designed and struck, and of a nominal size only, as befitted coins intended for purely regional circulation.

To this class of coinage Sir Arthur Evans's two pieces are perhaps to be attributed, though they might of course have been produced much later. On grounds of portraiture alone I had previously conjectured⁷ that coins of the time of Probus might be recognized as rare models for radiate imitation. More recently the imitation of Probus types has been proved by legend-bearing coins in the Richborough radiate hoard, which includes also pieces referring by their legends to Tacitus and perhaps to Carausius.⁸ These Richborough radiates, however, belong beyond all doubt to the sub-Roman period of Britain, as has been ably demonstrated: but for this, current foreign theory concerning radiate imitations in Britain must obviously have admitted the production of imitations between c. A.D. 270 and 296. It is distinctly unfortunate that the obliterated obverse type of Sir Arthur's coin no. (1) cannot be deciphered, so as to tell us whether the original issue was of the third or of the fourth century. But the case for the recrudescence in Britain of radiate copies, in the late fourth century and in the fifth century and even after, is now reasonably secure: similarly, there is no ground for disputing the archaeological evidence, provided by the sealed deposit of Verulamium minims, for a greatly debased radiate coinage in the latter half of the third century. The Verulamium minims, however, are held to have been buried "c. A.D. 300":⁹ they were in fairly close association with another group of coins (not a hoard) of which the latest datable examples were of Carausius;¹⁰ and so, like the minims in the Segontium hoard,¹¹ they appear to belong to a period of production falling c. A.D. 285-290. There is still no justification for assuming or asserting that the great bulk of the third-century minim coinage fell, in Britain, about A.D. 270: whether Sir Arthur Evans's coin is overstruck on a piece of the third century or on one of the fourth, the weight of the

⁷ Sutherland, *op. cit.*, p. 126.

⁸ Mattingly and Stebbing, *op. cit.*, p. 5; cf. Wheeler and O'Neil, *op. cit.*, p. 224.

⁹ Wheeler and O'Neil, *op. cit.*, p. 227.

¹⁰ *Id.*, p. 214.

¹¹ *Arch. Cambrensis*, 1922, pp. 291 ff.

present evidence places the beginning of minims in Britain within the last fifteen years of the third century.¹²

A word may be added on the die-identity of the two present coins, by which their regional character is suggested. Previously recorded instances of die-identities in an imitated series occur, indeed, in deposits of minims of fifth- rather than third-century character,¹³ though examples are not lacking in the Verulamium hoard. A minim coinage, however, whenever produced, was always in the nature of a token coinage—minims were tokens of convenience in the third century, tokens of pure necessity in the fifth and after: the circulation of a token is generally restricted, for it is intended to serve the economic needs of a definite area or community rather than to play any part in the system of a province at large. Thus it is not surprising that centres such as Richborough and Verulamium (doubtless paralleled by many others elsewhere) should give us the instances which we possess.

C. H. V. SUTHERLAND.

¹² The only British deposits which might encourage an early dating for minim copies, strictly contemporary with their prototypes, are those from Gt. Chesters, Brougham, and Segontium (hoard I). That from Brougham was imperfectly examined: and all these are very closely similar in composition to Segontium II (cited above, note 11) save that they lack any post-Tetrican issue, whereas Segontium II (which includes no coins of the period from Aurelian down to A.D. 286) closes with a single piece of Carausius.

¹³ Cf. Whitechurch (*Num. Chron.*, 1934, pp. 92 ff.; 1935, pp. 16 ff.); Hayle (*Num. Chron.*, 1936, pp. 202 ff.); and Richborough (Mattingly and Stebbing, *op. cit.*).

REVIEW.

Les distributions de blé et d'argent à la plèbe romaine sous l'Empire. Par DENIS VAN BERCHEM. Pp. 185. Georg et Cie S. A., Librairie de l'Université, Genève, 1939.

THIS valuable essay on an important side of public life in Rome has a special appeal to the numismatist; for the coins are never indifferent for long to the things that interested the Roman "plebs", and among those things we must certainly include the distributions of corn and money. The two, in fact, constituted the main reason why a large part of the "plebs" chose to reside in Rome at all.

The most obvious references on coins to "frumentationes" are conveyed by the recurrent types of "Annona" or "Annona Augusti Ceres." Occasionally the imperial "Providence" is made responsible for the due provision for Rome's material needs. The largesse in money is represented either by the symbolic figure of the goddess Liberalitas with her "tessera" or "abacus"¹ or else by a quite realistic representation of the actual ceremony—the Emperor presiding, the citizen duly stepping up to receive his gift.

The general picture is clear enough and, in view of its importance for Roman social and political history, this is most fortunate. The details, as Dr. van Berchem's admirable study reveals, soon lose themselves in obscurities. It is not certain in what way the recipients of free corn were restricted or selected. It is not certain whether the recipients of free corn and of money doles were the same. It is not certain what part in the provision and distribution of corn was taken at different times by Emperor and Senate. This is not, of course, to deny that reasonable conclusions can often be drawn from available evidence: of this, the careful studies in this book will soon convince the reader. But it is well sometimes to remember how much fuller an "Encyclopaedia of Classical Ignorance" might be than our more conventional volumes.

The student of Roman coins cannot fail to find much of value and interest in this well-conceived and well-executed work.

HAROLD MATTINGLY.

¹ Dr. van Berchem's suggestion that this is really a tablet, with a handle and holes to contain the coins given, deserves serious consideration.

XIV.

SOME CONTEMPORARY IMITATIONS OF MEDIEVAL COIN MOTIFS.

THE use by artists of motifs derived from coins and medals is a subject to which little attention has hitherto been devoted. It is obvious that any one who attempted a complete study would be faced with the compilation of a large book, as since the Renaissance a widespread use has been made of decorative roundels containing profile heads of Roman emperors and empresses, or the less historical heroes of antiquity. We have only to think of such far-separated examples as the façade of the Certosa di Pavia and the plaster ceilings of Canonbury Tower, to realize the extent of ground which would have to be covered.

I propose to confine myself here, however, to the medieval examples to be found at the Victoria and Albert Museum. During the Middle Ages the use of motifs borrowed from coins was decidedly rare, and I have only four pieces to discuss. None of them happens to date earlier than the close of the thirteenth century, but to this no importance need be attached. If we exclude the crude renderings of Roman coin motifs produced by the various barbaric peoples during the Dark Ages, we could still find a number of examples belonging to an earlier period of the Middle Ages than those about which I am going to speak. The ornamental border of the celebrated altar frontal, of

about 1150, from Lisbjerg church, now in the National Museum, Copenhagen, contains at least one roundel clearly inspired by a bracteate.

During the Middle Ages the connexion between the officials of the mint and the local goldsmiths was always close, and it is still symbolized in this country by the Trial of the Pyx, annually carried out by the officials of the Goldsmiths' Company. It might be anticipated that, for this reason, we should be concerned mainly with goldsmiths' work. The use of numismatic motifs was by no means confined to the workers in the precious metals, however, and in fact each of the pieces to be discussed was made by a different type of craftsman.

The first piece with which I propose to deal is a fragment of ecclesiastical goldsmiths' work which reached the Museum with the Salting Bequest in 1910.¹ It is solidly constructed in gilt copper and consists of three parts. The base is hexagonal with slightly incurved sides. At each angle is a very spiritedly executed two-legged monster with a long wavy tail. Between these are set six trefoil-shaped silver plaques nielloed with scenes from the Passion.

The knop is set half-way up the stem and presents an elaborate castellated appearance. The lower part of the stem is plain except for a band of moulding. Above the knop it spreads out into a capital, surrounded by foliage and surmounted by a band decorated alternately with pellets grouped in threes, and full-faced

¹ For illustrations and a more lengthy account see *Burlington Magazine*, lvi, 1930, 38-41.

male heads with the hair bound in a fillet (fig. 1). It is perfectly clear that these last motifs are borrowed from the well-known variety of continental sterling in which the sovereign's head appears wearing a fillet, instead of being crowned as on the English original.

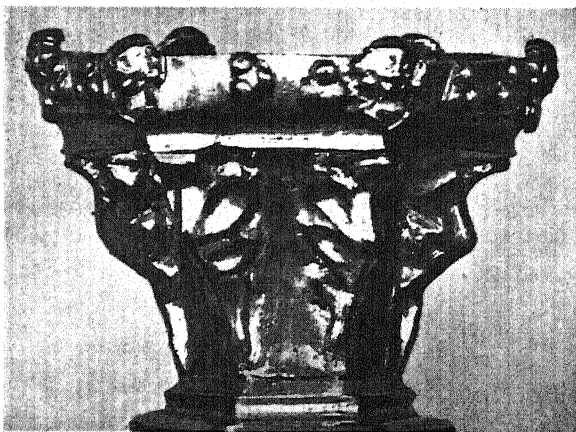


FIG. 1.

This particular variety of sterling was used widely in the districts which now compose Belgium and Holland and the adjacent parts of France and Germany, so that it is impossible to be at all definite about the place of origin of this piece. The numismatic evidence, however, is of considerable help in fixing its date. These imitation sterlings began to appear very soon after the issue of their English originals in 1279, and seem to have gone out of fashion during the second decade of the fourteenth century.

An attribution to the Low Countries and to about the year 1300 is fully in accordance with the rest of the evidence. The medieval artist whose name is best

remembered in connexion with the niello technique is Hugo of Oignies, co-founder with his brothers in 1192 of an Augustinian priory at Oignies-sur-Sambre, near Namur, where he remained as a lay-brother until his death in about 1230. Despite his success in the use of the technique, its popularity declined after his time, but it would still be true to say that at the close of the thirteenth century it was being practised more freely in the southern Netherlands than elsewhere.

If we consider the possible uses to which the piece can have been put we find the same region indicated. It clearly cannot have formed part of a chalice, but the fact that the nielloed scenes depict the Passion seems to indicate some connexion with the Eucharist. It is difficult to picture it as part of a ciborium, but we can well imagine it as the lower part of a monstrance.

The practice of exposing the Sacrament appears to have originated late in the thirteenth century, probably in the Liège district where had dwelt St. Juliana of Cornillon who had been largely responsible for the institution of the Feast of Corpus Christi. The earliest known monstrance is dated 1286 and is preserved at St. Quentin, Hasselt. It is of silver-gilt and consists of a hexagonal foot and stem, surmounted by a little Gothic edifice with a pointed roof. Our fragment might quite well have formed something of this sort, and it is most satisfactory to see how well the artistic, liturgical, and numismatic evidence dovetails together.

Whilst it is hard to imagine any but a purely decorative purpose in the use on a monstrance of motifs derived from current coins, the numismatic decoration of the next piece has a very obvious significance.

Amongst the many treasures which passed to the museum in 1855 at the sale of the Bernal Collection, was a small oak casket sheathed in copper-gilt and reinforced with bands of the same material (fig. 2).



FIG. 2.

It measures $8\frac{1}{2}$ in. \times $6\frac{1}{2}$ in. and its height is 5 in. The copper sheeting, wherever it is exposed, is delicately pounced with foliage, but the greater part of the surface is covered by lozenge-shaped plaques stamped from two separate dies. One of these depicts the full face, head, and shoulders of a king wearing a crown with three fleurs-de-lis. The other shows a lion sejant round whose neck is a scarf, the ends of which are blown over its back.

The significance of these types had they appeared separately might have been open to dispute. Taken

together they can only allow a single interpretation. The casket is quite sufficiently substantial for use as a portable treasure-chest, whilst the technique used is one suitable for large-scale production. I think, therefore, that we may safely regard it as the work of an enterprising London coppersmith who thought to produce an up-to-date line of goods to celebrate the new coinage of 1344. The large king's head, I think, is clearly intended for that on the sterling, whilst the lion sejant undoubtedly imitates the one on the leopard or half-florin. The coppersmith, like the king, had no suspicion that the new gold coins were not destined to become a permanent feature of the English coinage. Let us hope that when the florin coinage was withdrawn after only eight months of circulation, he was able to get rid of his stock as successfully as the makers of Edward VIII coronation mugs.

Towards the end of 1938 the Museum acquired from a London dealer an object for which no parallel is known. It is a woman's girdle of carved wood, about 4 ft. 6 $\frac{3}{4}$ in. long, consisting of twenty-two links and a hook in the form of a two-legged monster with a second head at the end of its tail.² The links are each formed like an elongated figure eight and have a carved device at the intersection. In some cases the device is treated as a single whole, but almost as often there is no connexion between the motifs on the two sides. The subjects, it will be noted, are mainly connected with outdoor and indoor sports. Starting from the hook they are as follows:—

² A fully illustrated account of this piece will appear in the Museum's *Review of Acquisitions for 1939*.

1. A knot.
2. Two heraldic shields.
3. Two wreaths (?).
4. A hound leashed to a tree.
5. An oak.
6. Two boars in a thicket.
7. A boar net.
- 8 *a.* A hand holding a spear-head amidst foliage.
b. A wine-flask hanging from a bough.
- 9 *a.* Head of a huntsman blowing a horn.
b. A bird on a bough.
10. Two hounds.
- 11 *a.* Forepart of a stag pierced by an arrow.
b. A squirrel up a tree.
- 12 *a.* Head and shoulders of an archer wearing a hood and shooting an arrow.
b. A hound leashed to a tree.
- 13 *a.* A rabbit eating an ear of wheat.
b. A rabbit eating an ear of barley.
14. A puppy whose tail is being bitten by a cock.
15. A knot.
16. A dragon swallowing its tail.
- 17 *a.* A chess board.
b. A backgammon board.
- 18 *a.* Two dice.
b. A pile of four coins.
19. A knot.
- 20 *a.* A hand grasping a wreath.
b. A spray of forget-me-nots.
- 21 *a.* Head and shoulders of a man combing his hair before a mirror.
b. A tree.
- 22 *a.* A ship.
b. Six tuns.

A cursory glance at the general treatment and the few details of costume which are depicted make it clear that we are dealing with a piece of fourteenth-century date. For a closer diagnosis there are obviously two main lines of inquiry. The first is the significance of the two coats-of-arms and the second is that of the coin which appears on the top of the pile on the eighteenth link.

The two coats-of-arms described heraldically are (1) chequy a canton ermine (or erminois) all within a border, and (2) a lion rampant.

Anyone at all familiar with thirteenth and fourteenth-century French heraldry will recognize on the first shield the arms of the Dreux, Dukes of Brittany. Though the second shield would normally be difficult to identify, appearing in its present position, it can be safely accepted as being that of the Counts of Montfort l'Amauri. This makes it necessary to go back to the complicated family history of the Dukes of Brittany, which led to the spilling of much English and French blood during the fourteenth century.

As a result of King John's murder of his nephew Arthur in 1203, the male line of the old house of Brittany came to an end and the succession devolved on the murdered ruler's half-sister. She married Peter, son of Robert II, Count of Dreux, a union which led to the combination of the arms of Dreux and Brittany which we see on the girdle. Peter, however, had a brother whose grandson, Robert IV, married the heiress of the county of Montfort l'Amauri, and the daughter of this couple became the second wife of Peter's own great-grandson Arthur II, Duke of Brittany. This union, which brought together the arms of Dreux-Brittany and Montfort l'Amauri, resulted in the birth of a son named John who, on the death of his mother in 1322, became Count of Montfort l'Amauri. Arthur II, who died in 1312, had left another son by his first wife, who succeeded as John III of Brittany and died without issue in 1341. His death resulted in an outbreak of civil war over the constitutional

point whether the succession should pass to the daughter of the late duke's deceased brother, who had married Charles of Blois, brother of Philip VI of France, or, if females were barred, to John of Montfort.

The king of France, who intervened on behalf of Charles of Blois, succeeded in capturing John of Montfort at Nantes and sent him as a prisoner to the Louvre. This would have ended the civil war but for the heroism of Joanna of Flanders, Montfort's wife, who put on armour herself and carried on a spirited campaign on behalf of her husband. The latter escaped from Paris in 1345 but died shortly after, so that his rights devolved on his son of the same name. The Breton civil war soon became involved in the Hundred Years War and was not settled until 1364 when Charles of Blois was killed on the battlefield of Auray. Though the younger John of Montfort was henceforth the only recognized duke of Brittany, his rule over his duchy was not undisputed. He was a fervent supporter of the English cause, even when that cause was in decline. As a result he had to spend a considerable part of his reign, which ended in 1399, in England where the Dukes of Brittany had long possessed the important Honour of Richmond.

We must now return to link 18 which shows two dice and a pile of four coins representing those lost or won by dicing. The device on the topmost coin alone is visible. It is $\frac{5}{8}$ in. (16 mm.) in diameter and is therefore about the size of the ordinary fourteenth-century penny (fig. 3). In the centre is a cross pattée surrounded by a beaded circle round which is the inscription—: MONETA: IOHANNIS SIM' which in its

turn is surrounded by a beaded circle. It may be noted that the last *l* is somewhat doubtful. It is merely a straight line and might be regarded as having been intended for conversion into three dots but never completed. The lettering is most unhelpful,

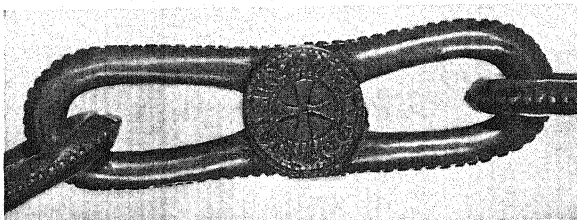


FIG. 3.

as every form can be paralleled on English or French coins throughout the fourteenth century.

Soon after the girdle had been acquired I sent an impression of the coin to Mr. Derek Allen who made a most able analysis of the problem. Firstly he reported that he could find no corresponding coin, and I may add that neither M. Dieudonné nor I have been any more successful. This seems to imply that we are dealing with an imaginary coin.

He suggests the following interpretations:—

- I. If read **MONETA IOHANIS SIM.**
 - (a) Let me be the coin of John!
 - (b) If *sim*=simplex as opposed to duplex. The single coin of John.
 - (c) If *sim*=simulacrum. The representation of John's coin.
- II. If read **MONETA IOHANISS M.** The last letter might stand for Marchionis or some similar title.
- III. If read **MONETA IOHANIS S M.** There are innumerable possible interpretations. Seigneur de M., etc.

Now of these Ia seems to be ruled out by the apostrophe after the Ω of $SI\Omega$. Mr. Allen preferred Ib, but I have so far failed to find any instance of a coin with simplex on it, though, of course, those with duplex are innumerable. Personally I prefer Ic.

With regard to the other two readings, II assumes that the carver was illiterate. If he was capable of writing "Iohanis" with one "n" and with no sign of abbreviation over it, it may fairly be urged that he might have put two "s-s". There is no literary difficulty about III, but I do not much like it. By the fourteenth century the number of feudal mints in France was getting quite limited. I cannot find any title which would fit these letters, and even if it be urged that the inscription was admittedly intended as a joke, I think that it would have appeared to contemporaries as too obscure to be good. In order to make the joke a fair one we have to accept that the John in question was entitled to strike coins.

Personally I think that the John on the coin taken in conjunction with the coats-of-arms must refer to one or other of the Johns of Montfort. Though the representation of the coin does not resemble those attributed to either duke, I would regard this as merely artistic licence. Now there appears to be no reason for supposing that the counts of Montfort l'Amauri ever exercised the right to strike coins, so that the earliest possible date for the girdle would be 1341 when the elder John entered his claim to the duchy of Brittany. The circumstances, both of the pretender and of his supporters during the four troubled years of his nominal reign, do not favour

the idea that the girdle might have been made before his death in 1345.

The second John was only about six years of age when his father died and spent his youth in England. In 1361 he married Margaret, fourth daughter of Edward III, but his wife died within the year. He did not marry again until 1372 when he married Joan Holland, step-daughter of the Black Prince, who survived until 1384. His third marriage to Joan of Navarre hardly enters the question, for I think that this is clearly not a piece dating from the close of the fourteenth century.

If the girdle had been made for either of the duke's English wives we might have expected to find some direct allusion to them amongst the large variety of subjects depicted. It is possible, of course, that the girdle may be a relic of some temporary love affair, but I would not like to discount the possibility that it might have been made as a present for his mother in which case the absence of the recipient's arms would be less remarkable.³

There remains now the question where the girdle was made. The life of the younger John of Montfort appears to have been divided mainly between his duchy and England where he spent long periods of exile due to his political incapacity. His excursions into the more sophisticated parts of France seem generally to have partaken of the character of forays.

The whole trouble is that there is so little with which the girdle can be profitably compared. When I showed it to M. Marquet de Vasselot, he remarked

³ Incidentally the arms of the counts of Flanders also consisted of a lion rampant.

that he was convinced that it was neither French nor Breton work. In this I think that he is right, as one feels that a French artist's work would have shown a refinement equal to his technical skill, whilst that of a Breton would have been lacking in both qualities. The nearest parallel to the girdle would appear to be "Queen Elizabeth's Viol", one of the less-known treasures of Warwick Castle.⁴ The sides of this very interesting early musical instrument are delicately carved with hunting-scenes on very much the same scale and in a style closely similar to that of the girdle. Though it provides no clues for accurate dating, an origin in the middle or second half of the fourteenth century would seem to be indicated by the costume. It is unfortunately equally deficient in direct evidence of its place of origin, though the gilt copper additions to it show that it has been in this country since at least the year 1578. Unless it can be shown that this type of work was a speciality of some other part of Europe, and that these pieces were, therefore, the work of a wandering artist, I think that we shall have to regard them as English. We have only to look at the Luttrell Psalter, produced in about 1340, to see the relish and skill with which an English artist could treat scenes from everyday life and how he could mix these with the wildest fantasies. If we seek parallels, however, amongst woodcarvings of indisputable English origin, we shall have to look at works on a much larger scale. The closest resemblances that I have been able to note are amongst the hunting-

⁴ Illus. *Warwick Castle and its Earls*, by the Countess of Warwick, 1903, i, 353.

scenes on the mid-fourteenth-century *misereres* at Ely.⁵ The resemblance is not sufficiently close for us to claim them as being by a carver bred in the same workshop as the maker of the girdle, but I think that they display much the same feeling.

The medieval bronze-founder was very much more prone to decorate his wares with numismatic motifs than was the goldsmith, coppersmith, or wood-carver. This does not imply that he showed any preference for numismatic motifs as such, but rather that when he was casting small wares like mortars, he found that coins could be very easily worked into the design. He used goldsmiths' stamps, classical cameos, religious plaquettes, and his own bell-founding stamps with equal readiness, and, indeed, anything which would give a good impression. For this reason classical coins were preferred because of their greater relief. He was not at all exacting in his demands. Many of the coins he used were badly rubbed and I have never noted the reproduction of any classical coin which could be described as rare.

One of the mortars in the Museum is, however, worthy of mention because it bears the impression of an unpublished jetton (fig. 4). It was presented last year by Dr. W. L. Hildburgh, F.S.A., and must be French work of the latter half of the fifteenth century. It stands about $3\frac{1}{2}$ in. high and has a spreading lip decorated with a rosary and with a row of fleurs-de-lis set askew.

The side is divided by six vertical ribs (a common

⁵ More especially the two archers on S. side sub-stall 23, and the hunters with hounds pursuing a stag and rabbits on N. side stalls 2 and 4, respectively.

feature in French mortars), each in the form of a battlemented turret with a cross-bow slit and a doorway. Between these are two rows of fleurs-



FIG. 4.

de-lis with a varied row of ornaments. With one exception these last would appear to have been reproduced from the little ornaments which goldsmiths were wont to cast or stamp out for the decoration of girdles and inexpensive jewellery. Four are suns with wavy rays, one shows the busts of a young man and woman within two interlaced squares, whilst two are roundels containing demi-figures of St. Catherine and St. Roch, respectively. The remaining roundel is $\frac{3}{4}$ in. in diameter and depicts a full-faced head with flowing hair, within a roped circle itself surrounded by ten pellets and another circle.

It is impossible to overlook the resemblance of this roundel to the early fourteenth-century jettons modelled

on English sterlings, in which a border of pellets replaced the inscription. As the head is uncrowned, it would appear that the original was a jetton produced in the Low Countries. It is interesting to note that whereas the makers of all the other pieces quoted in this paper, used current numismatic types, this jetton must have been quite a hundred and fifty years old when it was pressed into the mould for casting the mortar.

The study of numismatics is a highly specialized one which will readily absorb all the time its devotees can spare for it. The aim of this paper has been, however, to point out to numismatists that valuable results may be obtained if they will pool their information with those studying other types of art-history. If I have been concerned mainly with the numismatist's contribution, I am not envisaging a type of exchange in which the benefits accrue all to one party. There are much greater rewards for numismatists to obtain by collaboration with students of other types of art, than the recording of a single unpublished jetton.

C. C. OMAN.

XV.

A HOARD OF DRACHMS OF ELIS.

[SEE PLATE XIV.]

IN 1936 the bulk of a hoard was offered to the British Museum which consisted of 222 drachms of Elis of the Hellenistic period, one fourth-century piece also of Elis, and two late Boeotian drachms, altogether 225 pieces.¹ In the same year I saw on the Athenian market eight similar pieces, belonging most probably to the same hoard. Prof. N. Petsalis of Athens also showed me two interesting pieces of the same kind, purchased by him in this same year and said to come from a recent find. I am very much indebted to him for casts of these important coins, and wish to express my thanks for his kind permission to publish them.

When I informed Mr. E. S. G. Robinson of these additions to the hoard in the British Museum, he very kindly proposed that I should publish it. In endeavouring to carry out his proposal I desire first of all to express my thanks to him. Without his experience and help in reading the manuscript and in discussing many problems arising from its contents this paper could never have been written.

With the exception of one drachm of the fourth century B.C. and the two Boeotian coins mentioned above, the hoard, so far as it is known, contained only Elean drachms of that latest series which C. T. Seltman

¹ Cp. S. P. Noe, *Bibliography of Greek Coin Hoards*² (1937), *Num. Notes and Monographs* No. 79, p. 109, no. 385.

has described under "Group L" in his *Corpus*.² Of this special class he only enumerates six specimens of three different types. But these drachms are commoner and their types more numerous than appears from Seltman's work. The present hoard, at all events, offers a good occasion to study their issues, date, types, weight-standards, &c., in greater detail than hitherto had been possible.

In the following description of the hoard its contents are divided into four groups according to the different varieties of type and the die-links, to be discussed in greater detail after the catalogue. In general the obverses show, besides merely stylistic differences, two principal varieties: one where the hare held by the flying eagle is struggling in a running attitude and one where he hangs stiffly from the bird's talons.³ The reverses are, as usual, more numerous and show three principal varieties: one in which the thunderbolt is provided with the additional symbols of pomegranate and pine-cone; a second in which it is decorated above with a pair of volutes and below with wings; and a third in which to this latter type are added the monograms, initials, or symbols of magistrates, and in which, on a few dies (some of which were hitherto unknown), the thunderbolt is particularly rich in detail.

Most of the series are linked with each other by obverse or reverse dies. Many of these dies had suffered

² *The Temple Coins of Olympia* (1921), pp. 73-4, Pl. VIII. 33-5.

³ Seltman does not describe this variety, though it already appears in E. Babelon's *Traité*, ii, 3 (1914), Pl. CCXXXV. 4, p. 759, no. 1168. Thanks to the kindness of Mr. R. Cyril Lockett, I am able to mention here a single specimen of this type which has the eagle to left and is not represented in this hoard nor in any other illustrated sale catalogue or private collection.

hard usage and some were nearly destroyed. Generally they are somewhat carelessly executed. The introduction of magistrates' initials, &c., in the later issues suggests that there may have been some necessity for better control and personal responsibility owing to the increased coinage. In spite of a certain monotony several varieties claim a special interest, and certain problems of metrology and of die-technique, suggested by the contents of the hoard, are no less worthy of study than the dates of its issues and of its burial.

The hoard contained the following coins:

CATALOGUE OF THE HOARD.

ELIS. *Circa* 385-365 B.C.

A. *Obv.*: Head of Hera r., wearing stephanos.

Rev.: Eagle standing l., head turned backwards;
border of dots.

5-41 (very worn). Cf. Seltman, p. 91, 2
(Pl. XIX. 572) 1

Circa 230-191 B.C.

Group I (nos. 1-5).

1. *Obv. (1)*: Eagle flying r., wings raised over back, head down, beak touching head and claws grasping back of a struggling hare in running attitude r.

Rev. (1): F/A. Thunderbolt; upper half with heart-shaped pomegranate laid on two large petals, on each side four wavy flame-lines over it. Lower half with two volutes curling outwards; on them big pine-cone, and four wavy flame lines to left, three to right of it, downwards.

4-71 [Pl. XIV], 4-66, 4-70, 4-70, 4-21 (very oxidized), 4-76, 4-67 (double struck) . . . 7

2. *Obv.* (1): Same die.

Rev. (2): F/A. Same type, but on lower half only three wavy flame-lines on each side of the pine-cone. Design more careless.

4-73, 4-57, 4-70, 4-66, 4-24, 4-24, 4-70,
Athens (market) one 8

3. *Obv.* (1): Same die (seems slightly re-cut).

Rev. (3): F/A. Same type; petals more horizontal and volutes flatter. Above and below nine wavy flame-lines.

4-76, 4-60, 4-73, 4-53, 4-66, 4-70, 4-70, 4-60,
4-66, 4-66, Athens (market) one 11

4. *Obv.* (1): Same die (rather worn).

Rev. (4): F/A. Same type; very similar to *Rev.* 3, but only eight wavy flame-lines above and below, and the ends of the petals curved upwards.

4-78, 4-73, 4-76, 4-57, 4-65, 4-76, 4-47, 4-56,
4-73, 4-53, 4-73, 4-76, 4-57 18

5. *Obv.* (1): Same die (very worn).

Rev. (5): F/A. Same type; but the volutes and the pine-cone on the upper, the petals and the pomegranate on the lower part of the thunderbolt; above and below nine wavy flame-lines. (Two increasing flaws in the left upper part of the die.)

4-78, 4-52, 4-79, 4-76, 4-66, 4-72, 4-57, 4-73,
4-76, 4-76 10

*Group II (nos. 6-11).*6. *Obv.* (2): Eagle flying r., wings and head raised higher up, claws grasping a hare with stiffly outstretched legs.

Rev. (6): F/A. Thunderbolt; on upper half, two volutes on either side curling outwards; on lower half, two wings. (Flaws in the field r., above and beneath A.)

4-74, 4-76, 4-70, 4-70, 4-74, 4-72, 4-65, 4-57,
4-75 9

7. *Obv.* (2): Same die (more worn). (Small flaw beginning near the head of the eagle and near the hare's ears.)
Rev. (7): F/A. Similar; bigger wings on lower part of the thunderbolt. (Flaw on the upper r. volute.)
 4.71 [Pl. XIV], 4.73, 4.66, 4.65, 4.63. 5
8. *Obv.* (2): Same die. (Increasing flaws.)
Rev. (8): Similar; only one knob on the handle. (Damage near the starting-point of the volutes; big flaw over the upper part of the die in its latest state.)
 4.73, 4.70, 4.69, 4.74, 4.65, 4.69, 4.73, 4.65, 4.74, 4.68, 4.57, 4.79, 4.71, 4.74, 4.73, Athens (market) one 16
9. *Obv.* (2): Same die. (Flaw over head and forelegs of hare.)
Rev. (9): F/A. Similar; three buttons on handle (Flaws in the field to l. and on the l. wing.)
 4.68, 4.76, 4.76, 4.73, 4.65, 4.68, 4.74, 4.78, 4.74, 4.67 10
10. *Obv.* (2): Same die. (Increasing flaw below in the field r.)
Rev. (10): F/A. Similar die; one big button on handle.
 4.73, 4.53, 4.56, 4.76, 4.53, 4.72, 4.59, Athens (market) one 8
11. *Obv.* (2): Same die (very worn). (Big flaw beneath forelegs of hare.)
Rev. (11): F/A. Similar die. (Flaw in the field r. near handle.)
 4.66, 4.63 2

Group III (nos. 12-26).

12. *Obv.* (3): Eagle flying to r., like *Obv.* 1, but smaller type. (Small flaw beneath hare.)
Rev. (11): Same die. (Flaw to r. increased.)
 4.53 1

13. *Obv.* (3): Same die.
Rev. (12): F/A. Similar thunderbolt. (Flaw on the handle.)
 4-76, 4-78, 4-78, 4-55, 4-70, 4-70, 4-74, 4-57
 [Pl. XIV] 8
14. *Obv.* (3): Same die (more worn).
Rev. (13): F/A. Similar, but of more careless design. (Flaw in the left field beneath F.)
 4-70, 4-85, 4-73, 4-78, 4-66, 4-64, 4-72, 4-68,
 4-67, 4-76, 4-78, 4-72, Athens (market) one 13
15. *Obv.* (3): Same die.
Rev. (14): F/A. Similar; one knob on handle; again less careful design. (Flaw in the field to l. above.)
 4-71, 4-63 2
16. *Obv.* (3): Same die.
Rev. (15): F/A. Similar, but without any handle. (Flaw in the middle of the thunderbolt.)
 4-74, 4-62, 4-66, 4-69, 4-80 5
17. *Obv.* (3): Same die (last state).
Rev. (16): F/A. Similar, but three knobs on handle.
 4-73, 4-66, 4-70, 4-78 4
18. *Obv.* (4): Similar to *Obv.* 3, but wings of the eagle smaller. (Flaw beneath the tail feather.)
Rev. (16): Same die. (Small flaw on the lower left volute.)
 4-85, 4-76, 4-80, 4-53 4
19. *Obv.* (4): Same die (more worn).
Rev. (17): F/A. Similar die, but the wings not so far spread away. (Small flaw in the left field.)
 4-77, 4-79, 4-85, 4-76 4
20. *Obv.* (5): Similar to *Obv.* 4, but left wing less raised and tail feather more outstretched. (Increasing flaw over the wings.)

- Rev.* (18): F/A. Similar thunderbolt; volutes bigger.
4-83, 4-76, 4-74, 4-76, 4-73, 4-78, 4-72, 4-76 8
21. *Obv.* (6): Very similar to *Obv.* 5, but left foreleg of hare less raised and other small differences. (Flaw in the field r. above and between the hare's forelegs.)
Rev. (18): Same die.
4-76, 4-63 2
22. *Obv.* (6): Same die. (Flaws in the field.)
Rev. (19): F/A. Very similar to *Rev.* 18 (same hub?). (Flaw near F.)
4-76, 4-78, 4-76, 4-59 4
23. *Obv.* (6): Same die.
Rev. (20): F/A. Very similar to the preceding; right wing of eagle more raised. (Same hub?)
4-81 1
24. *Obv.* (6): Same die.
Rev. (21): F/A. Similar; more carelessly executed.
4-78 1
Another specimen of this combination of dies is Hirsch sale XXI. (Consul Weber), no. 1947 = Cat. L. Hamburger 93 (1930), no. 250; 4-88.
25. *Obv.* (6): Same die (very worn).
Rev. (22): F/A. Similar to the preceding. (Flaws in the left field between the volutes and in the right field beneath A.)
4-78, 4-58, 4-78, 4-80, 4-83, 4-60 6
26. *Obv.* (7): Very similar die (same hub?); slight differences in details only, e.g. in the tail feathers. (Flaws in the field.)
Rev. (23): F/A. Thunderbolt similar as before. (Flaw on left wing and in the field to left.)
4-85 1
Another specimen of this die-combination is Hirsch sale XXV, no. 1297.

Group IV (nos. 27-49).

27. *Obv.* (8): Eagle similar to *Obv.* 3, but influenced by *Obvv.* 4-7; left wing raised higher up; head more vertical; feathers rendered by rows of dots (Flaws in the field.)
Rev. (24): F/A-A/N. Thunderbolt with volutes and wings as before.
 4-73, 4-65 [Pl. XIV] 2
28. *Obv.* (8): Same die. (Flaws in the field increased.)
Rev. (24 a): Same die, but B added in the field to right above.
 4-78 [Pl. XIV] 1
29. *Obv.* (9): Similar; head of the eagle bigger, body smaller.
Rev. (25): F/A-A/N. Similar; but in the field right Γ . (Flaw on the wavy flame-lines above to left.)
 4-79 [Pl. XIV] 1
30. *Obv.* (9): Same die (more worn).
Rev. (25 a): Same die, but the Γ in the field is altered into E. (Flaw increased.)
 4-83, 4-79, 4-61 [Pl. XIV] 3
31. *Obv.* (9): Same die (very worn).
Rev. (26): F/A. Similar, but careless execution. In the field to left monogram \bar{A} ; to right an amphora (diota). (Flaw in the field to left.)
 4-80 [Pl. XIV] 1
32. *Obv.* (10): Very similar to the preceding no. 9; claws of the eagle more curved. (Flaw in the field behind the tail of the hare.)
Rev. (26): Same die (more worn).
 4-67, 4-78, 4-87, 4-87, 4-79 5

33. *Obv.* (10): Same die (more worn).
Rev. (27): Similar to *Rev.* 26; same monogram; amphora bigger.
 4.76, 4.85, 4.78. 3
34. *Obv.* (11): Similar die; rather careless. (Flaws before the wings of eagle and elsewhere in the field.)
Rev. (28): F/A-A/P. Thunderbolt as before. (Flaws on handle and right wing.)
 4.91, 4.56, 4.87, 4.81, Athens (market) one 5
35. *Obv.* (12): Similar die. (Flaws on the head and the tail of the eagle.)
Rev. (29): F/A-A/P. Similar to *Rev.* 28.
 4.84 [Pl. XIV], 4.46, 4.78, 4.74 4
36. *Obv.* (13): Similar die (rather worn).
Rev. (30): F/A-Σ/Ω. Thunderbolt as before; in the field to left a wreath; die very worn. (Flaw above l. wing.)
 4.94 [Pl. XIV], 4.82, 4.66, 4.65, Athens (market) one 5
37. *Obv.* (14): Similar eagle and hare; but in the left field Σ above the tail feather of the eagle.
Rev. (31): F/A-Σ/Ω. Similar to *Rev.* 30, but wreath larger. (Beneath, flaws.)
 4.73 1
38. *Obv.* (14): Same die.
Rev. (32): F/A-Σ/Ω. Similar to the preceding, but wreath here in the field to right.
 4.68, 4.53, 4.53 3
39. *Obv.* (15): Similar; but the hare is larger and Σ beneath the tail feather of the eagle.
Rev. (33): F/A-Σ/Ω. Thunderbolt with two pairs of volutes above and below the handle, which is winged; wreath in the field to right above the wing on the handle.
 4.83 [Pl. XIV], 4.57, 4.35 (broken) 3

40. *Obv.* (16): Very similar, but minute differences (same hub?).
Rev. (34): F/A-Σ/Ω. One pair of volutes only above and beneath the handle, which is winged; wreath in the field to right; careless design.
 4-89 [Pl. XIV] 1
41. *Obv.* (17): Similar eagle, but without letter.
Rev. (35): F/A-⚡. Thunderbolt, above and beneath the winged handle two pairs of volutes; the shape of the handle is a human face (Gorgoneion).
 4-80 (Athens, Coll. Prof. N. Petsalis), Athens (market) one 2
42. *Obv.* (18): Similar; ends of the wings slightly different and other minute differences. (Same hub.)
Rev. (36): F/A-⚡/symbol sea-horse. Similar thunderbolt, but wings and handle slightly larger; in the field to right a sea-monster as symbol. (Same hub as *Rev.* 35.)
 4-85 [Pl. XIV], 4-80 (Athens, Coll. Prof. N. Petsalis) 2
43. *Obv.* (19): Similar; ends of the wings more curved.
Rev. (37): F/A-T/l. Thunderbolt similar to *Revs.* 24-29, but with T/l.
 4-72 [Pl. XIV] 1
44. *Obv.* (19): Same die.
Rev. (38): F/A-K/A. Similar thunderbolt (same hub?). (Flaws near F, &c.)
 4-82 [Pl. XIV], 4-92, 4-85, 4-68, 4-83 5
45. *Obv.* (19): Same die, more worn (or possibly another die from the same hub?).
Rev. (39): F/A-K/A. Very similar to *Rev.* 38, but more carelessly executed.
 5-02, 4-50, 4-70, 4-57, 4-74 5
46. *Obv.* (20): Similar.
Rev. (40): F/A-Σ/Π. Similar thunderbolt.
 4-70 [Pl. XIV], 4-71 2

47. *Obv.* (21): Similar, but border of dots.
Rev. (41): F/A. Thunderbolt as before; in the field to r. monogram AK beneath the A. (Flaw begins in field to left near the handle.)
 4.83 [Pl. XIV], 4.81, 4.81, 4.75, 4.76, 4.52 6
48. *Obv.* (22): Similar die, but dots of the border thicker.
Rev. (41): Same die. (Flaw in the field to left increased.)
 4.92, 4.83, 4.79, 4.70. 4
49. *Obv.* (23): Similar die without border of dots; very careless execution.
Rev. (42): F/A-Φ/l. Thunderbolt as before.
 4.85 (oval blank), 4.77 [Pl. XIV], 4.64 (oval) 3
50. Double-struck brockage of a coin of Group II with incuse eagle on the reverse and countermark; thunderbolt between F/A.
 4.74 [Pl. XIV]. 1

ΒΟΕΩΤΙΑ. Circa 196-146 B.C.

- B. *Obv.*: Head of Poseidon r., laureate; border of dots.
Rev.: ΒΟΙΩΤΩΝ. Nike standing l., with trident and wreath; in the field to l. monogram AV (B.M.C. 95).
 4.95 1

C. *Obv.* Similar.

- Rev.* Similar, but monogram Δ^{χ} (B.M.C. 99).
 4.87 1
 Total 235

The drachm A of the hoard is obviously its earliest coin. The very worn condition and the low weight of this piece show the length of its circulation, which may be estimated, from the arguments discussed below,

at perhaps 180 years before it was buried with this hoard. The coin is a second example of the hitherto unique specimen in the Benson sale (Sotheby 1909), Pl. XIX. 572, mentioned by Seltman on p. 91 of his Corpus under no. 2 of the fractions of the so-called Hera mint.⁴ It was struck c. 370 B.C.

GROUP I.

Nos. 1-5 represent the first group of the later Elean issues which constitute the bulk of the hoard. That this group must be the earliest of the four into which this coinage can now be divided may be inferred both from the average state of preservation of the 49 specimens, buried with this hoard, compared with that of six of another hoard discussed below under "Dates and Burial", and from their relatively low weights, demonstrated in the table of frequency on p. 265. The majority of the specimens of this group, at all events, is more worn and has therefore lost more weight by circulation than the coins of the other three groups.

Furthermore the style, notably of the obverse die, shows earlier features and more care in the execution of its design than that of the other groups of this issue.

Instead of Seltman's two examples of the reverse type of this group,⁵ we have here 49 specimens from five different reverse dies, united by the one good obverse which recalls the earliest Elean coinage of archaic times. A number of specimens recorded from

⁴ But cp. Sir George Hill in *Num. Chron.*, 1923, pp. 359-60, and K. Regling in *Berliner Philolog. Wochenschrift*, 1922, p. 1144. Both authors have rightly questioned the existence of two separate, so-called Zeus and Hera mints, at Olympia. For the date of the Hera coins cp. furthermore, *ibid.*, p. 1143, note 2.

⁵ *loc. cit.*, p. 74, Pl. VIII. 35 = (B.M.C. 134, Pl. XV. 9).

illustrated sale catalogues, all belonging to the category here established, helps to confirm the inference that the contents of the hoard provide us with full evidence of this issue. The chronological arrangement of this group of five coins and of the other die-linked groups is based on the relative condition of the obverse-die, which shows progressive signs of wear, and the increasing carelessness in the design of the reverses. The types of this group are discussed in more detail below.

GROUP II.

No die-link connects this second group with group I. But the average state of preservation of its 50 specimens, together with their relatively low weights and the style of both obverse and reverse dies, would assure its place between I and III even if its last reverse die (no. 11) had not been combined in a later stage with the first obverse die of the following group III (no. 12). In group II itself the variations of its unique obverse from a good to a very worn state assure the chronological sequence of the six only slightly different reverses.

GROUP III.

This group is linked with group II, as mentioned above, by the reverse die 11, but combined with the last group IV only by the very similar style of its types. That IV, however, follows III would be sufficiently indicated by the later and sometimes more careless style of its dies, even if it were not definitely proved by the much higher average of its weights, shown by the table of frequency. The third group, 15 different coins, represented in the hoard by 64 specimens, struck from 5 obverse and 12(+1) reverse

dies, most of which are linked and therefore relatively datable, may appear, it is true, somewhat uninteresting. But the group shows in an instructive manner the quick degeneration of types when imitated from each other, as here, in a large coinage and within a relatively short space of time.

GROUP IV.

The last group, perhaps from certain points of view the most interesting, consists of no less than 23 different die-combinations, represented by 68 specimens and struck from 16 obverse with 19 reverse dies, some of which are altered in their design. The sequence of the first seven coins (nos. 27-33) is given either by such die-alterations or by links in the combinations of dies. Then follow two coins (nos. 34 and 35) which are linked by the initials AP of the magistrate's name which they bear, perhaps the same as that abbreviated API on some of the later staters (Seltman, *op. cit.*, p. 69, and, within his group L, no. 240). The next series is linked internally by the letters ΣΩ and the symbol of a wreath in the field of the reverse; it consists of five coins (nos. 36-40) of which the last two show a thunderbolt with winged handle. This type, which was already known (*B.M.C. Peloponnesus*, Pl. XV. 10; Seltman, *op. cit.*, Pl. VIII. 33; and *Traité*, ii, 3, Pl. CCXXXV. 6) is again varied by an interesting type, hitherto unknown, consisting of two very similar coins (nos. 41 and 42), each of which is represented by two specimens only, appearing for the first time in this hoard. For this type, with the handle in the form of a human head (Gorgoneion), see the section "Types". The remaining seven coins (nos. 43-9) are connected by die-combinations (nos. 43-5),

by style (no. 46), and types (nos. 47-9), most of the latter showing the least degeneration of style, the best preservation, and the highest average of weights.

TYPES.

The two normal obverse types have already been mentioned in the introduction. There is no doubt that we have to do with "reversions" or "restitutions"—as Head and Seltman have called these imitations—of the earliest Elean obverse types of archaic times.⁶ But there are more variants than has hitherto been guessed and they show, besides a clear development in style, several different types. Groups I and II each have one obverse type, represented by two single dies only. Obverse 1 is obviously copied from Seltman's die AN in his group B, Series VIII (Pl. II), whilst obverse 2 is perhaps an imitation of a die like AY in his group C (Pl. III), where the first winged thunderbolts also appear on the reverses. Our groups III and IV, on the other hand, are united by one obverse type, imitated perhaps from types BK and BL of Seltman's group D (Pl. IV), but represented here by at least 21 different dies. In group III (dies 3-7), and even in die 8 of IV, we notice an increasing degeneration of this type, which is here copied six times from one model. Obverses 9-13 of group IV have a slightly different type of eagle with smaller body and larger head. Obverses 14-16 have a Σ near a similar eagle. Obverses 17-18, combined with a new reverse type, are probably from the same hub and show, like nos. 19 and 20, an eagle with slightly more raised wings. And finally obverses 21 and 22 have borders of dots.

⁶ B. V. Head, *H. N.*², p. 425; C. T. Seltman, *op. cit.*, pp. 108-9.

The reverse types are again richer than could have hitherto been suspected. To begin with group I, we have here Seltman's type Pl. VIII, no. 35, in five slightly different forms. Stylistically reverse 1 is obviously the prototype, executed in the most delicate manner of all, and perhaps imitated from the reverse die $\gamma\gamma$ of Seltman's group D (Pl. IV). Reverse 2 is a weak imitation of it, while 3 is again a transformation of the same general idea, further imitated by the more careless dies 4 and 5.

The general idea, however, which underlies the reverse type in group I, seems a remarkable one. It combines two other symbols with the emblem of Zeus in a manner which is far from being "devoid of any particular significance".⁷ Such unusual additions can hardly be explained as "only late Hellenistic decorations added for the sake of ornament". We may see here, I suggest, a good example of how the cult tendencies of a period may be reflected in the coin types. The pomegranate as a symbol of fruitfulness is associated with Hera from very early times, the pine-cone with Dionysos, and it is now well known to what degree a revival of the oldest Greek cults and of the earliest symbolism is characteristic of Hellenistic times. Some new reverse types of group IV of our hoard also give good evidence of the same phenomenon. In the old Olympian sanctuary we have hitherto had no sign of the existence of these cults and their reviving symbolism. These coins may at least indicate their presence and perhaps help towards further researches in other fields in the future.

⁷ C. T. Seltman, *loc. cit.*, p. 109.

Groups II and III add nothing new with regard to their reverse types with winged thunderbolts, being rather monotonous imitations of the fine die $\gamma\delta$ of Seltman's group D (Pl. IV).

In group IV, finally, besides the various monograms, symbols, and letters of magistrates, there appear some important new variants of the same main type. Reverses 33 and 34, for instance, have birds' wings attached to the middle of the handles of their thunderbolts. Their appearance on the Hellenistic form of that emblem has already been pointed out by P. Jacobsthal,⁸ and confirmed by Seltman's Corpus, as a glance at his Plate VIII shows. Reverses 35 and 36 repeat this motive with the difference that the handle here has the shape of a human face, which is unknown either to Jacobsthal in his book cited above,⁹ or to Seltman who has collected the thunderbolts of Elean coins at the end of his Corpus (p. 105). We may see here another amalgamation of old cult symbols, if we follow a suggestion of Prof. A. B. Cook, who recognizes in this head with great probability a Gorgoneion, the old apotropaic symbol of Athena, who at times wields the thunderbolt of her father.

⁸ *Der Blitz in der orientalischen und griechischen Kunst*, Berlin (Weidmann), 1906, p. 27, and p. 42, note 1.

⁹ But he cites two non-numismatic examples with similar handles: those on the oval terra-cotta shields, fixed on the walls of a grave at Eretria, *Athen. Mitt.*, xxvi (1901), p. 363; P. Wolters, *Jahrb. d. Inst.*, 1899, p. 128; *American Journ. Arch.*, 1898, p. 147; and on a red-figured vase in Naples, *Mon. Inst.*, IX. vi. To explain these examples of human-faced thunderbolt handles only as "Umbildungen aus dem Schildbuckel" seems to me as unsatisfactory as Seltman's explanations of our reverse type 1, cited above.

The increasing luxuriance of the appearance of thunderbolts at this time seems again to reflect the retrospective tendency in Hellenistic thought and the revival of archaic cult symbolism already observed in the reverses of group I. Some analogy with the same phenomenon in more recent times may perhaps be seen in the rich baroque decorations added in the seventeenth and eighteenth centuries to many mediaeval statues of the Virgin Mary in southern Germany.

METROLOGY.

As C. T. Seltman has already pointed out, the weight standard of this late Elean coin-group is practically that of the Achaean League.¹⁰ This standard, so far as it is known, must be recognized as a reduced Aeginetic one with an average weight of c. 2.8-2.3 grm. for its hemidrachms (or triobols), the main denomination of this vast coinage. The table of frequency shows the normal weight of our group of Elean drachms to be approximately 4.73 grm. Even allowing for wear, this is not nearly high enough to correspond with the weights of the three known didrachms of reduced standard probably struck in the period.¹¹ This remarkable difference can scarcely be explained, I think, by the idea that "such small pieces would not be weighed in market transactions".¹² But it may be remembered that our denomination, the drachm, was an extraordinary one at that time, when the hemidrachms (or triobols) of the League had long been the predominant small change throughout the Peloponnese.

¹⁰ *loc. cit.*, p. 74.

¹² *loc. cit.*, p. 74.

¹¹ *loc. cit.*, pp. 73-4.

The exceptional coinage of drachms (or half-staters), now under consideration, possibly originated in an attempt to compensate at an economically critical time for the increasing disappearance from currency of the good Elean staters of normal or reduced weight mentioned above. The surprisingly small number of extant staters of this period, compared with nearly all the other groups in Seltman's Corpus,¹³ is capable of more than one explanation. It may be that only a small number was struck. On the other hand, it is perhaps more probable that the scarcity is due to the operation of Gresham's law, the bad money in the shape of the small and often debased triobols of the Achæan League driving out the good staters. Now, where previously the Eleans lost by changing one of their good staters, even of the reduced weight of *c.* 10.7 grm., for four of these Achæan triobols, circulating as the main currency within their country, there was now a chance of balancing that loss by the exchange of two triobols for one of the new Elean drachms (or half-staters) struck on an exact, if somewhat lower, standard. Two of these new drachms, on the other hand, plus an Achæan League triobol, would equal almost exactly an Elean stater of full weight.

Our hoard, in addition, shows us clearly for the first time that this drachm coinage was on a considerable scale. This fact seems to confirm the theory that there was some economic necessity of the kind suggested above, and at the same time requires an earlier date

¹³ In his "Group L" C. T. Seltman could enumerate only three specimens of staters! Most of them had probably been withdrawn from circulation shortly after their appearance on the market and found their way, as explained below, to the melting-pot.

for the issue of this coinage than Seltman had suggested.¹⁴

TECHNIQUE.

From the point of view of the technique of striking this hoard offers some interesting problems. A careful study of die-positions of the coins shows that there was no regularity whatever. The increasing carelessness, furthermore, with which the individual dies were executed during this coinage may now be better observed, as we know its probable sequence from the contents of our hoard. In particular, most of the dies are copied from certain models, themselves copied from earlier types, as demonstrated above. These model-dies may perhaps be recognized in the obverse dies 1 and 3 (while obverse 2 seems to be a single and isolated type) and in the reverses 1, 7, 33, and 35. As a matter of fact not a few of the dies copied from them are so closely related to one another that there can be little doubt of their origin from a limited number of hubs only. This seems to be the case with the following obverse dies which are surprisingly similar: nos. 5-7, 10-13, 15-16, 17-18, and 19-23. Among the reverse dies the same technique may have produced nos. 18-20, 24-5, 26-7, 28-9, 30-2, 35-6, 37-8, and 39-42.¹⁵

¹⁴ Cf. against the date "after 191 B.C." already K. Regling in *Philolog. Wochenschrift*, Berlin, 1922, p. 1143, note 2, and E. T. Newell, *Alexander Hoards IV* (*Num. Notes and Mon.* 39), pp. 15-16. Cf. *infra* pp. 260-2.

¹⁵ The hubbing process was first described by Sir George Hill in his article in *Num. Chron.*, 1922, pp. 19 seq. Cf. also C. T. Seltman, *Athens*, p. 44. The same phenomenon was called "minutiöse Stempelkopie" by J. Liegle in a review in *Zeitschr. f. Numismatik*, 40 (1930), pp. 341-2.

The absolute chronology of die-groups, sometimes even their relative date, therefore depends on the recognition of this method of die-making which seems to be more common in Greek mints than has hitherto been believed or observed. Although in many cases it might be difficult to prove definitely, yet to neglect it totally might occasionally lead to errors in dating; for in the study of series of coins we have now to take into account not only the sequence of dies from which our coins have come but, wherever possible, the hubs from which in many cases a whole series of dies may have been produced, which therefore may be expected to be contemporary.

In one of the later series a circle of dots was introduced on two of the obverse dies which also, by the way, seem to originate from one hub. This was used for other dies at the same time, though these in their final form lack the circle: compare the illustrations of these obverse dies (nos. 20-3) on **PL. XIV** (nos. 46-49). The striking of these latest coins of the issue seems to be very carelessly done, the flans being almost oval in shape and not well centred in the coining process.

Interesting from a technical point of view is finally no. 50, a so-called brockage reproducing on the reverse the obverse type in intaglio, an accident due to the sticking of a coin after striking in the upper die.¹⁶ The brockage thus produced was obviously picked out afterwards and stamped with a little countermark containing a thunderbolt between F/A, to guarantee its currency. Why this brockage was not used for

¹⁶ Cf. *Num. Chron.*, 1922, p. 35 (Sir George Hill); *Wörterb. d. Mzhde.*, pp. 284-5 (K. Regling); and *Zeitschr. f. Num.*, 36 (1926), pp. 65-7 (Ph. Lederer).

a blank again is not easy to understand—perhaps because it was already too damaged to be restruck.

DATES OF ISSUE AND BURIAL.

In discussing the metrological problems of this hoard an earlier date has already been suggested for the coinage of these late Elean drachms than had recently been given to them in C. T. Seltman's *Corpus*—though not so early as that suggested by E. Babelon in his *Traité*.¹⁷ That they must have been struck before the Eleans joined the League in 191 B.C., a *terminus ante quem* already given by P. Gardner in the *B. M. C.* and B. V. Head in the *Historia Numorum*, was also held by E. T. Newell on the evidence of another hoard, recently described by him.¹⁸ His arguments seem to be fully confirmed by our new hoard.

Newell's Olympia hoard contained only six specimens of these late drachms, all of our group I, and "they must have been in a truly brilliant state of preservation at the time the little treasure was buried".¹⁹ Besides these, continues the author, "not a single example of the similar—and equally common—types (Seltman, Pl. VIII. 33-4) seems to have been present". Now, Newell has shown with great probability that this Olympia hoard was buried between 235 and 225 B.C. It contained a few examples of the first group of this drachm coinage only. We must therefore infer a later date for the burial of our new hoard which provides us, with its wealth of types and specimens, with the continuation of that issue. Whereas only six pieces

¹⁷ ii, 3 (1914), p. 759, nos. 1168-70.

¹⁸ *Num. Notes and Monographs* 39 (1929), pp. 14-16 and 22-3.

¹⁹ *op. cit.*, p. 14.

of the first issues (Group I) of the coinage were found in the Olympia hoard, the new treasure contains no less than 49 specimens of this group, but nearly all considerably worn compared with the numerous specimens of three other groups found with them. According to the weights and conditions of its specimens group IV of these is very probably the latest of the whole issue. Supposing that it began shortly before the burial of Newell's Olympia hoard, *c.* 230 B.C., the total number of 23 obverse and 42 reverse dies represented in the new hoard would probably be sufficient to fill the space of some 40 years of coinage up till the entrance of the Eleans into the Achaean League. If we assume a continuous coinage, the average life of an obverse die would then be about one year and of a reverse die about half a year—a not unlikely assumption. Supposing, however, that the coinage was not continuous, but executed for instance every fourth year only, perhaps on the occasion of the games and then from actual economic necessities, our number of dies may possibly indicate two working anvils—each provided with one obverse and two reverse dies—another reasonable possibility especially for a coinage of large extent.

The very end of the whole issue, as mentioned above, seems to be represented in the last series of group IV with its careless execution. It is perhaps not impossible that they were struck under somewhat difficult circumstances as the Eleans were very much engaged in the troubles of the time, sympathizing with the Aetolians and the ambitious policy of Antiochus III against the Achaean League and the Romans. After the battle of Thermopylae in 191 B.C., however, when Antiochus had been expelled from Greece by the Romans, the

Eleans were involved in great danger, abandoned the Aetolians, and finally joined the Achaean League.²⁰ It is in such times when war threatens that hoards are likely to be put away. The approximate date of burial, 191 B.C., is also supported by the total lack—so far as is known—of any Achaean League triobols of Elis in this hoard and by the state of preservation of the two Boeotian drachms, certainly struck after 196 B.C.

In the troubled times about 191 B.C. then, the owner of this treasure very probably buried his possessions, fearing the accidents of war, and afterwards was prevented from unearthing them by reasons which we shall never know. Anyhow, his fear of loss has brought us, more than 2,000 years later, to a fuller knowledge of a hitherto little known Elean coinage and the date of its issue.

WILLY SCHWABACHER.

²⁰ Cf. Niese, *Gesch. d. griech. und macedon. Staaten*, II, pp. 694 and 711.

TABLES OF DIES.

GROUP I.

Combina- tions.	Dies.		Specimens.
	Obv.	Rev.	
1	1	1	7
2	—	2	8
3	—	3	11
4	—	4	13
5	—	5	10
Totals	5	5	49

GROUP II.

<i>Combina- tions.</i>	<i>Dies.</i>		<i>Specimens.</i>
	<i>Obv.</i>	<i>Rev.</i>	
6	2	6	9
7	—	7	5
8	—	8	16
9	—	9	10
10	—	10	8
11	—	11	2
Totals	6	6	50

GROUP III.

<i>Combina- tions.</i>	<i>Dies.</i>		<i>Specimens.</i>
	<i>Obv.</i>	<i>Rev.</i>	
12	3	— (11)	1
13	—	12	8
14	—	13	13
15	—	14	2
16	—	15	5
17	—	16	4
18	4	—	4
19	—	17	4
20	5	18	8
21	6	—	2
22	—	19	4
23	—	20	1
24	—	21	1
25	—	22	6
26	7	23	1
Totals	15	12 (+ 1)	64

GROUP IV.

<i>Combina- tions.</i>	<i>Dies.</i>		<i>Specimens.</i>
	<i>Obv.</i>	<i>Rev.</i>	
27	8	24	2
28	—	— (24 a)	1
29	9	25	1
30	—	— (25 a)	3
31	—	26	1
32	10	—	5
33	—	27	3
34	11	28	5
35	12	29	4
36	13	30	5
37	14	31	1
38	—	32	3
39	15	33	3
40	16	34	1
41	17	35	2
42	18	36	2
43	19	37	1
44	—	38	5
45	—	39	5
46	20	40	2
47	21	41	6
48	22	—	4
49	23	42	3
Totals	23	19	68 (+1)

SUMMARY.

<i>Groups.</i>	<i>Combina- tions.</i>	<i>Dies.</i>		<i>Specimens.</i>
		<i>Obv.</i>	<i>Rev.</i>	
I	5	1	5	49
II	6	1	6	50
III	15	5	12 (+1)	64
IV	23	16	19	69
Totals	4	49	42	232

TABLE OF FREQUENCY.

Grains.	5	10	15	20	25	30	35	Grammes.
65.0	A							4.21
65.5	A A							4.24
66.0								4.28
66.5								4.31
67.0	D (broken)							4.34
67.5								4.37
68.0								4.41
68.5								4.44
69.0	A							4.47
69.5	A D D							4.50
70.0	A A B B C							4.53
70.5	A A A A A							4.57
71.0	A A B C C							4.60
71.5	B B C C C							4.63
72.0	A A A A A							4.66
72.5	A A A A A							4.70
73.0	A A A A A							4.73
73.5	A A A A A							4.76
74.0	A A B B C							4.79
74.5	C C C D D							4.83
75.0	C C C C D							4.85
75.5	D							4.89
76.0	D D D D							4.92
76.5								4.96
77.0								4.99
77.5	D							5.02

225 pieces.

XVI.

BARBAROUS OVERSTRIKES FOUND IN FOURTH-CENTURY HOARDS.

[SEE PLATE XV.]

FINDS of late Roman *aes* made in England not infrequently include one or more overstrikes of a very paradoxical and perplexing character. The original coin was regular, the overstrike is barbarous. The original type seems invariably to be one of the later Constantinian or the earlier Constantian period and the superimposed type invariably the "Soldier spearing fallen horseman" of the immediately succeeding reform period. Falling thus within certain well-defined limits, this curious phenomenon may, as we have a right to hope, be capable of explanation in the light of our knowledge of mid-fourth century history.

In the Codex Theodosianus there is a rescript dated from Constantina in the eighth consulship of Constantius Augustus and the first of Julian Caesar (i.e. A.D. 356) and addressed to Rufinus *p(raefectus) p(raetorio)*.¹ Throughout it lays strong stress upon the distinction between *pecuniae in usu publico constitutae* and *pecuniae vetitae* and the keynote of the following argument is that it was just the effort to turn "forbidden" into "current" money which prompted the overstrikes that form our subject. There may be a better way of explaining them, but I find myself by a different route arriving

See note at the end of the article, p. 282.

at the same general conclusions as Seeck, who saw in the Constantian reform the ruin of the humbler folk whose few "coppers" formed their whole fortune.

The "Fel. temp. reparatio" series.

One of the most interesting series of Roman coins is that inaugurated by Constantius II and Constans with the uniform legend *Fel. temp. reparatio*. As its dating and its significance have been discussed by Mr. Mattingly in *Num. Chron.*, 1933, pp. 182-202, only the briefest summary of the types which compose the series need be given here as an introduction. We have :

1. \mathcal{A} . Victory supporting on a kneeling figure a shield inscribed *Vot XX*.
2. \mathcal{A} 3. Phoenix standing on rock or globe.
3. \mathcal{A} 2. Emperor standing with two captives before him.
4. \mathcal{A} 2. Emperor on horseback r., riding down a foeman who is on foot.
5. \mathcal{A} 2, \mathcal{A} 3. Soldier leading a small figure (who in most versions of the type is looking up to him in trustful attitude) away from a hut overhung by a tree.
6. \mathcal{A} 2, \mathcal{A} 3. Victory steering Emperor, who holds phoenix or Victory on globe and labarum.
7. \mathcal{A} 2, \mathcal{A} 3. Soldier spearing a fallen horseman, who is variously represented as stretching out his arms in appeal, or as clinging round his horse's neck, or as kneeling in appeal by the side of the stumbling horse.

By the time of Gallus (Caesar 351-354) only 6 and 7 were still being struck and, when Julian became Caesar in 355, only the \mathcal{A} 3 denomination of 7. This, however, is very common for him and, as the type which succeeded it—*Spes reipublice*—is equally common, we may place the final abandonment of the

Fel. temp. reparatio legend somewhere about the middle of Julian's Caesarship, i.e. about the end of A.D. 357.

Barbarous "coinage of necessity" in Britain.

Since 326 no mints had been working in Britain, and the resulting dearth of current coinage after this date must have caused great inconvenience especially in the outlying parts of the country. Local "imitations" arose to satisfy local needs, showing such diversity in the skill or, much more generally, want of skill with which they were executed as to suggest that their production was not confined to any one part of the country or to any one social grade of the population. It seems fair to infer from this diversity that any one, who could, might manufacture his own coinage, and, from the regular appearance of these barbarous copies side by side with their legitimate models in hoards, that they had their place in the general currency. Of course, it is impossible to suppose that such coins, generally—sometimes very much—undersized, and all lacking the silver wash of the legitimate issues could have been accepted as of equal value with these. They must rather have supplied the need for smaller change than any coin with a pretension to an admixture of silver in its composition could meet—a need that must have been keenly felt by the humbler members of the community. This point, however, does not concern us now. What does concern us is the fact that a barbarous "coinage of necessity" was a normal characteristic of village life in Britain, as testified by the multitude of crude imitations of the *Gloria exercitus*, *Urbs Roma*, *Constantinopolis*, and *Victoriae dd Augg q nn*

types which were struck at all the other mints of the Empire after the closing of the London mint.

Barbarous "Fel. temp. reparatio".

That this in its turn came to be imitated is only to be expected. Some of its types enumerated above had a very short life or are predominatingly eastern, and these, if found at all as imitations, are rare in Britain and call for no comment. Type 7 in its $\text{Æ} 3$ form, on the other hand, is not only imitated to an extent that in itself is quite exceptional but is also quite commonly found as an overstrike on legitimate coins of recent issue and in unworn condition, many of which still show clearer indications of the original type than of the overstrike. The universality and suddenness which seem to characterize the appearance of this particular type in Britain must have some interesting historical explanation, and as a step towards arriving at this I venture here to summarize the evidence given by some sixty specimens of these overstruck coins in the British Museum trays and the nine in Lord Bledisloe's Lydney I hoard.

It must be emphasized that the overstruck coins do not form a class by themselves except in so far as the overstrike is concerned. They are merely that portion of a comprehensive issue in which, instead of a blank, an actual coin is used as flan. Two of these coins in the British Museum have die-identity [Pl. XV. 4, 5]; one is an overstrike, the other not. It can hardly be doubted, any more than it can be proved, that large as the number of visibly overstruck coins is, the number of those in which the overstruck type has been more effectually obliterated is very much larger. But,

whether overstruck or not, almost all the barbarous Æ 3 with "Soldier spearing fallen horseman" type—and their number is legion—may, I think, be attributed to the same period. The later imitations are mostly minims.

The Underlying types.

In the British Museum are trays labelled "Barbarous" and "Barbarous overstrikes". Mr. Mattingly and I together looked carefully through the latter and the corresponding nine coins of Lord Bledisloe's Lydney I hoard for the purpose of this paper. The underlying types were sometimes more in evidence than their overstrike. Many were easily recognizable by reason of part of the type or legend clearly showing through, but some were so obliterated that only after a long scrutiny could we disentangle some small details by which they could be identified. A few defied identification altogether.

Of sixty-four coins examined the underlying types were :

- Gloria exercitus.* Two standards. 7. [Pl. XV. 1, 2.]
- " One standard. 17. [Pl. XV. 3-8.]
- Urbs Roma.* 5. [Pl. XV. 9, 10.]
- Constantinopolis.* 3. [Pl. XV. 11.]
- Pietas Romana.* 1.
- Victoriae dd Augg q nn.* 17. [Pl. XV. 12.]
- Fel. temp. reparatio.* 6. [Pl. XV. 13, 14.] One was of the "Phoenix", 3 of the "Soldier spearing fallen horseman", and one of the "Hut" type.
- Unidentified. 8. [Pl. XV. 15.]

The overstrike of all but two was the "Soldier spearing fallen horseman" type. Two were overstruck with the ✠ of the Magnentian A and ω *Salus* type.

One of these showed only **AVGG** of the original reverse, the other [Pl. XV. 16] was a trimmed fragment of what had been an **Æ 2** "Soldier spearing fallen horseman" type. All sixty-four coins were **Æ 3** or **Æ 3 small**.

During our examination it was borne in upon us that unless one was actually on the look-out for overstrikes a "barbarous overstrike" might easily escape notice, and accordingly we proceeded to give the same critical attention to the specimens labelled simply "barbarous", with the result that about 20 per cent. of these were found also to be overstrikes. In these, of course, the underlying type was usually much less obvious but, when it could be ascertained, it merely reinforced the evidence set out above.

These mean-looking little coins are common and do not seem to have received much attention from numismatists. It is hoped that their latent possibilities of valuable historical interest may be more fully exploited.

The Overstrikes: Obverses.

Legend and bust are always unmistakably barbarous, but not always to the same degree. Sometimes there is no attempt at a name, sometimes meaningless marks fill the place of letters, sometimes actual letters, equally meaningless, appear. More often, perhaps, a combination of a few letters is achieved, suggesting the name which was in the overstriker's mind or in his model, but in none of our examples is this name correctly given. In illustration of these various stages between absolute and relative illiteracy, I reproduce, as well as I can, some of the obverse "legends" which can be "read" with fair certainty:

ΙΛΛΛΛ, VHI, OIIDIOI, VVIV, N AUZOΛ, JONIA,
 OΛΠDO, QJIII AVSI, COZA, NT VSPPHVG, DMICOSIAN
 IIV, CONSTA, IIIICONDT V/PFAVC, CONET, DNCONS
 TIVSA, NCONS TIVS PFA.

It can be seen that where the "legend" is at all intelligible it points to a member of the Constantinian house and, in particular, to Constantius.

The bust is always in our examples "diademed r.". The portrait is occasionally a recognizable imitation of its model but is usually very crudely barbarous, sometimes with a sceatta-like treatment of the hair as bristles. Now and then by a stroke of luck or of native genius the result is a portrait of rugged power more satisfying to the artistic sense than the sleek official portrait seen from the authorized mints.

The Overstrikes : Reverses.

The reverses, like the obverses, show all grades of barbarism in the treatment of their copy, and the fact that hoards like Lydney I (containing overstrikes and not-overstrikes) and Covesea (containing not-overstrikes only), both dated early by the absence of later coins than those of Magnentius, already sound the lowest depths of this barbarism, shows that it is not to be referred to a long process of degradation but to individual lack of skill on the part of men suddenly forced to undertake highly technical work for which they had neither aptitude nor training. A neighbour with greater aptitude or with some training in metal work would at the same time be turning out a much superior version of their common model. It is useless, then, to formulate principles of differentiation between our coins and their fifth-century successors on the

basis of a more or less barbarous treatment of the reverse. The inability to include the whole of the rather complicated design within the limits of an Æ 3 flan, the consequent selection of one or other of its elements, either the soldier or the fallen horseman, as an adequate shorthand rendering of it, and even the final stage when the latter is simplified into a pattern of intersecting lines are all noticeable in our Lydney hoard.

Reverse legends and mint-marks, when attempted at all, follow much the same lines as the obverse legends. They are, however, fewer in number, as the reverse type itself demands more space than the obverse bust in unskilled hands and so leaves little room for lettering. I have noted the following (mint-marks are distinguished by the exergual line drawn over them):

CLCCII, IVVVV, OEDHAHT. CÖP, 4000VMN!O,
 IIPD, IICCIS, NCC, TM, TENRAT, LTENOT!O
 VOT, LTEMP RA!O, EL TEMP REPARA!O RT.

The Overstrikes. External evidence of place and time of striking.

The type which forms the overstrike occurs as an Æ 2, though rarely, for Constans. It must have begun, therefore, at least as early as 349 and it was continued with increasing intensity till the reign of Julian. It was struck at all the mints of the empire. Can we assign any precise limits of place or time to the peculiar class which we are investigating?

As regards "place", we must consult the records of finds. That these overstrikes are virtually universal in Britain is proved by the consensus of reports (to take a few of ready access) from Wales, Gloucester,

Hampshire, Kent, Essex, and Yorkshire. But there is no need to labour this point. On the other hand no mention of them—so far as I know—is made in reports of hoards unearthed on the Continent or in Egypt. I have myself examined a large Dalmatian and several Egyptian hoards, in which the "Soldier spearing fallen horseman" type was strongly represented, but, while "unauthorized imitations" of this were common, none bore visible signs of being an overstrike.

As the purpose of an overstrike is to obliterate the underlying type, the overstriker, if he is intelligent, probably takes good care to effect his purpose. None of the "unauthorized imitations" which I have just mentioned had even remote kinship with the grossly barbarous class which forms our subject. They were the production of people who, with sufficient skill to come as close as they did to their model, might be supposed to combine intelligence enough to leave no obvious traces of a forbidden type underneath. I doubt whether in Gaul or along the Danube or in Egypt the standard of culture was anywhere quite as low as in the outlying villages of Britain from which I think most of the coins we are discussing came. Besides, these parts of the Empire possessed mints, and it is hard to believe that these could not somehow have been utilized to turn *vetitae* into *in usu publico constitutae*.² Still, although from what I have said, I should expect an underlying type to be effectually disguised in the more sophisticated parts of the Empire, I have yet to be assured that due search has been made abroad for overstrikes.

² I have found one or two clear instance among my own coins from authorized mints.

Are we, then, forced to admit that the phenomenon we are investigating is—for lack of evidence to the contrary—in all probability purely local in Britain and susceptible only of a purely local explanation? Not at all. The British Museum contains two coins (one as a cast) which, outweighing all the negative, give positive evidence that the motive which prompted the overstrikes here was operative at the other end of the empire. One [Pl. XV. 13] is a legitimate *Æ 2 Fel. temp. reparatio* "Hut" type, mint-mark ALEA overstruck with "Soldier spearing fallen horseman" mint-mark ALĒB. It seems to have been found at Hatchford in Surrey, but the workmanship of the semi-barbarous overstrike is clearly Alexandrian. The other (provenance unknown) [Pl. XV. 15.] shows overstrike of the same type with mint-mark ALEΔ on a legitimate *Æ 3* with mint-mark SMANΔ. Here the obliteration of the underlying type has been more successful. The workmanship again is no worse than semi-barbarous and again is clearly Alexandrian.

We have in the rescript quoted above a ban on certain types previously current and the enforcement of a newly established currency. We have in Britain and in Egypt a new and uniform type hurriedly overstruck on coinage of the past two decades. To connect rescript and overstrikes does not seem to me to be a straining of probabilities. For the date of this overstriking the external evidence is scanty. The earliest deposit which contains them is—so far as I know—that found at Lydney in Gloucestershire. This ends with coins of Constantius II, including Magnentius and Gallus, but excluding Julian. It contains not only numerous overstrikes of the kind which we are in-

vestigating but also many examples of the same barbarous type showing no understrike. Clearly these are contemporary and differ only in the care taken in preparing the flan or executing the overstrike. The composition of the hoard would admit of the dating c. 354, but the archaeological evidence points to 364 as the earliest possible date for its deposition. A hoard of precisely similar composition, except that overstrikes are absent, was unearthed at Covesea on the Moray Firth. This was evidently the loot of some Pictish invaders, and two of the coins illustrated by Miss Benton, who described them in *Proceedings of the Society of Antiquaries for Scotland*, lxxv, pp. 209-216, have been pierced to serve as ornament. One still has its wire attachment.

The Overstrikes. Internal Evidence of Date.

The external evidence does not help us much; we must examine the composition of the hoards. They give evidence of a time when the *Fel. temp. reparatio* series of the reform had been whittled down to the Æ 3 "Soldier spearing fallen horseman" type. Its only other type occurring in the Lydney and Covesea hoards is "Emperor on galley", represented by a barbarous Æ 2. The two hoards, then, seem to reflect the state of the currency as it existed in the early part of Julian's reign. By this time the period of overstriking was ended; there is no evidence of it on SPES REIPUBLICÆ nor on any of the Valentinianian coinage. However, one of the Alexandrian overstrikes is of the Æ 2 denomination and so presumably goes back as far as the reign of Gallus. No overstrike of this description is to be found—so far as I know—

among the typically British barbarous overstrikes. But, as Magnentius held Britain from 350 to 353 and certainly can have had nothing to do with these overstrikes which bear the name and type of Constantius, we find no difficulty in inferring that the motive for them became operative in the east before the removal of Magnentius allowed it to be felt in the west.

The intervention of the three years of Magnentius's reign narrows the limits within which we must look for the occasion of these overstrikes in Britain. It must be either pre-Magnentius or post-Magnentius. We have just seen that the overstrikes are consistent with the currency of the early part of Julian's Caesarship but that the evidence from the east demands an earlier date for the beginning of the practice abroad. But if it had begun in the reign of Constans our British overstrikes would have tried to copy his name, whereas, when there is any clear indication of a name, it is always that of Constantius. **Pl. XV. 4** may be an exception, but as the coinage of Constans, struck by him in his own and his brother's names, is far commoner with his own name in western finds, it would not be surprising to find this copied unintelligently now and then even after his death. However, we are safe, I think, in saying that Constantius alone is recognized on these barbarous coins. Another point is that the overstrike is found on coins bearing the *Fel. temp. reparatio* legend itself—certainly on the "Phoenix" and the "Hut" types, and these are common enough to make it unlikely that they were suppressed so early as 349. On three coins the overstrike seems strangely to be superimposed upon a legitimate original

of identical type. I am not very much surprised at this lack of discrimination on the part of men who could produce such barbarous workmanship. Panic-stricken by the threatened loss of all their small savings and seeing only one means of salvation, it is small wonder if they struck blindly.

Mr. Mattingly prefers a different explanation, which would, of course, dissociate the two Alexandrian coins and the overstrikes mentioned in note 2 from our main body of evidence. However, the phenomenon we are investigating is of so paradoxical a nature, that when I find it occurring in precisely similar form at both ends of the Empire, I find it difficult not to see in this the effects of a common cause. What that cause may have been is suggested by the rescript of Cod. Theod. IX. 23. 1. This appears to me to be the rather petulant expression of a determination to enforce observance of regulations previously laid down but still disregarded by merchants. On this view the original enactment might date from some time in the Caesarship of Gallus and the rescript might find its appropriate place in 356.

General Summary of the Evidence.

With the exception of one Æ2 clearly eastern in both original type and overstrike, all the coins examined above are either Æ3 or Æ3 small, and were found, certainly most, possibly all of them, in Britain or, more precisely, in England. But these overstrikes are clearly contemporary—there is a case of die-identity between an overstruck and a not-overstruck coin—with a much larger number of barbarous coins of the same character which show no trace of an underlying type, and all are imitations of a correctly

struck issue from authorized mints, which seems to have begun as *Æ* 3 after the death of Constans and to have been discontinued about 357. It is reasonable to suppose that the imitation took place while the imitated type was current. But between 350 and 353 Magnentius was in control of the western mints, and though according to Cohen our type and legend are found for him as a (rare) "PBQ", yet we cannot attribute to him a measure consisting in the substitution of one Constantian type for another with retention of Constantius's name, and indeed we find this type actually overstruck with the ✠ of Magnentius's *Salus* type. We seem, then, forced to accept a post-Magnentian date for our coins. When, after the defeat of Magnentius, Constantius resumed control of the Gallic mints, the only "P.B." survivor of the *Fel. temp. reparatio* series was the type of "Soldier spearing fallen horseman", though the "Galley" type still appeared as "M. B.". By the time of Julian this latter also had disappeared. As, too, the name of Constantius is alone recognizable on our coins and, to judge from the *Second Richborough Report*, is almost exclusively found on their barbarous contemporaries which are not overstrikes, it is natural to conclude that they date from a time which suits both emperor and type.

I have assumed throughout that the overstrickers were subjects of the empire and not barbarian invaders. Undoubtedly the Alexandrian overstrikes mentioned above were the work of trained craftsmen and no ignorant barbarians. Their motive I believe to be the same as prompted the similar but clumsy attempts at the other end of the Empire—attempts to make *pecuniae* which had been declared *vetitae* pass as

the *pecuniae in usu publico constitutae*. The demonetization of previous issues and the consequent distress of the poorest classes whose wealth consisted in a few coppers, when they found that even these were lost to them without compensation, were according to Seock a weighty cause of Constans's unpopularity and downfall. There were certainly barbarian invaders about this time who could have produced a coinage of the kind under discussion, but I fail to see any ground for assuming that they did so. Is there any evidence that they were accustomed to the use of coined money, except when pierced to serve as ornaments like two of the coins in their Covesea loot? *Ex hypothesi* they took without payment in Britain, or wherever the scene of their depredations lay; and, if they intended to introduce the novelty of a metal currency in their own country, why, having found the time and taken the trouble to deface some small proportion of the coins, did they leave them behind? Also, we should still lack an explanation of the Alexandrian overstrikes.

J. W. E. PEARCE.

THE theory developed by Mr. Pearce in this paper is well-knit and attractive, but there are certain arguments which can and ought to be stated against his view and in favour of a very different one. We take the objections to his theory first:

(1) The phenomenon of these overstrikes is, so far as we yet know, almost confined to Britain. On Mr. Pearce's showing it should be Empire-wide.

(2) He can give no explanation but accident for the overstriking of barbarous on normal *Fel. temp. reparatio*.

(3) The extreme barbarism and illiteracy of most of the overstrikes suggest conditions that could hardly obtain in a Roman province in time of peace.

The alternative solution must be to regard these "barbarous" pieces as actually the products of barbarians or of a province reduced by discord to the barbarian level. The necessary conditions would seem to have existed in Britain during the time of the great Pict invasion under Valentinian I. We could explain at once the wildest features of our coins, and, if we should have to credit the Picts or native Britons with a positive wish to replace good Roman coinage with hideous imitations, there is nothing inherently improbable in that. There may have been a general conviction that Roman rule would never return. The choice of the reverse type would depend on its savage character rather than on any political sympathy for one Emperor rather than another. The finding at Covesea of barbarous imitations of *Fel. temp. reparatio* similar to those found on overstrikes may be claimed as a small piece of evidence in favour of the "Pict" hypothesis. But what really inclines me personally to this view is the occurrence of so many hoards of late Constantinian coins, which many students now incline to attribute to the time of the Pict troubles. If these coins—coins of precisely the same classes as those overstruck—really formed the bulk of the money in circulation, then we have yet another vital condition satisfied. When the barbarians

turned to overstriking Roman coins, that was precisely what they found before them.

So far, a measure of disagreement between Mr. Pearce and myself. We shall have no difficulty, however, in agreeing that the problem is widening out beyond its limits as we first saw them and the first need is for all the further evidence that may be available.

HAROLD MATTINGLY.

NOTE TO PAGE 266.

Sc. Galliarum. Mommsen and Seeck, taking Constantina to be Cirta in Numidia instead of Arelate in Gaul (both were known also as Constantina), are forced to look for a Rufinus who was *praef. praet. Italiae* and arrive respectively at the years 352 and 346 as the date of the rescript. We know from Ammianus (xiv. 10. 4) that when Constantius was at Arelate in 353 Rufinus was praetorian prefect of Gaul, and I know of no proof that he did not still fill the office in 356. For my present purpose, however, it is sufficient that the rescript should fall within the period when "Soldier spearing fallen horseman" was a—or the—current type.

The rescript itself is of extreme numismatic importance in more ways than the one that concerns us now; or rather, would be, if we could make certain of its meaning. After forbidding, clearly enough, (1) illicit coining, (2) exporting money as an article of merchandise, (3) the taking by merchants of more money abroad than 1,000 folles *pecuniae in usu publico constitutae* (i.e. "of the recognized currency") for "travelling expenses", it goes on: *Nam pecunias navibus vectas non omnes indicamus mercatores debere promere, quippe in usu tantum publico pecunias constitutas permittimus conveyi.* (There is an explicit ban on the export of any but the "recognized" or "established" coinage, which, at this time, must be the *Fel. temp. reparatio* series, or a particular part of it.) *Itemque eas solas species emi quae mercatoribus more solenni ad diversa portantur.* (There is to be no buying except of the customary articles of merchandise.) *Pecunias*

vero nulli emere omnino fas erit nec vetitas contrectare quia in usu publico constitutas pretium oportet esse, non mercem. (Buying of coin is absolutely banned—i.e. the current coinage, for the “demonetized” being altogether taboo does not come into consideration—because the currency is intended as a measure of value, not as itself an article of merchandise.) *Placet denique ut, si quis forsitan nummus praeter eum, qui in usu publico perseverat, apud aliquem mercatorem fuerit inventus, fisci dominio cum omnibus delinquentis facultatibus vindicetur.* (The finding of “demonetized” coinage in the possession of a trader will subject him to the forfeiture of all his property.) *Et si forte cum mercibus ad quasunque provincias venerint naves, cuncta solita licentia mercabuntur praeter pecunias. quas more solito maiorinas vel centenionales communes appellant, vel ceteras, quas vetitas esse cognoscunt.* (In any part of the Empire the trader shall have, as heretofore, full liberty to buy anything except the money known generally as *maiorinae* or *centenionales communes* or all the rest which they know to be “demonetized”.) I have paraphrased ambiguously this ambiguous passage. *Pecunias . . . emere* and *nec vetitas contrectare* above seem certainly to refer to two classes of money—that in currency and that out of currency. Then the last sentence, summing up what has been said before, must include the same two classes, the *maiorinae* or *centenionales* (?one denomination with alternative names, or two distinct denominations) and the “demonetized”. Can the passage be taken to suggest a good reason for our overstrikes?

On the wider question of the application of the rescript to a particular financial situation see Mickwitz, *Geld und Wirtschaft*, pp. 108–113, who connects it with the phenomenal inflation of the denarius in Egypt about the middle of the fourth century.

XVII.

A HOARD OF ROMAN COINS FROM CHESTERFIELD, N. DERBYSHIRE.

EARLY in May 1939 a gang of men was excavating a trench for the laying of conduit for telephone cables in Malvern Road in the Brockwell district of Chesterfield, when, after digging through between one and two feet of clay, they uncovered a number of coins lying in a layer of dark soil. According to a statement made by one of the men, the coins were in a small heap, as though they had originally been in a purse or bag which had subsequently rotted away. Unfortunately, the conduit was laid immediately and the trench filled in, so that no examination of the site has been possible. It seems fairly certain, from inquiries made of the finders, that the total number of coins found was twenty-eight and that, with one exception, all were denarii.

The coins were shared among the men on the spot, who disposed of them in various ways, some exchanging them for cigarettes, others selling them to acquaintances. In all probably the hoard would have passed unrecorded but for the fortunate chance that Mr. H. Hindley of Barnsley, who was in charge of some of the men a day or so later, heard of the discovery and was sufficiently interested to borrow six of the coins from one of the finders and show them to his family. Mr. Hindley's son happened to be present when the writer was showing an old English coin to other school-boys, and mentioned the recent find, giving an ex-

tremely clear description of the coins. From his account it seemed certain that the hoard consisted of Roman coins, and steps were at once taken to trace as many of them as possible. After several visits to Chesterfield the writer succeeded in recovering the twenty coins listed below; of the remaining eight, two are known to have been irretrievably lost, and it has not so far been possible to discover the present whereabouts of the other six.

From the appended list it will be seen that the hoard, as preserved, consists of denarii extending in date from c. A.D. 194 to c. A.D. 241, with a single bronze coin, a dupondius of Hadrian, datable to A.D. 118, an interesting survival. The fact that the list is incomplete naturally makes it impossible for us to state the exact range of the hoard, but if, as seems likely, the missing coins fall between the same dates, we may compare the present hoard with another hoard from a site nearby, Ashover, also in N. Derbyshire.¹ The Ashover hoard, of forty-two silver coins, extended, like the silver of the present hoard, from Septimius Severus to Gordian III, with a peak at Severus Alexander. The presence, in this Chesterfield hoard, of bronze with silver, a rare feature after the time of Marcus Aurelius, is made even more interesting by the early date of the bronze, which is in a good state of preservation. This mixed character of the hoard is paralleled by a mixed hoard of the same period from Padfield,² another Derbyshire site. An additional point of interest is the absence of Antoniniani.

¹ Ashover Hoard, *British Numismatic Journal*, Series II, vi (1921-2), p. 369.

² Padfield Hoard, *V. C. H., Derbyshire*, i, p. 260. For both these

With the exception of the denarii of Septimius Severus and Julia Domna, the coins are all in a very good state of preservation; in particular, the Maximinus, no. 18, is in practically mint condition.

I should like to express my gratitude for the interest and help of Mr. H. Mattingly of the British Museum on this and many other occasions.

The hoard is distributed over reigns as follows:

HADRIAN	1 (Aes)
SEPTIMIUS SEVERUS	2
CARACALLA	1
ELAGABALUS	2
SEVERUS ALEXANDER	10
MAXIMIN I	2
GORDIAN III.	2
	<hr/> 20

All are of the mint of Rome, except no. 2, which is of an Eastern mint (Emesa?) and no. 14, which is of Antioch.

Hadrian, A.D. 117-138 (1).

1. *Obv.* IMP CAESAR TRAIANVS HADRIANVS AVG. Bust, radiate, r., with drapery on l. shoulder.

Rev. PONT MAX TR POT COS II (round); s c (in field); FORT RED (in ex.). Fortuna seated l., holding rudder and cornucopiae.

A.D. 118. Dupondius. M. & S. 557.

This was the only bronze coin in the hoard, a remarkable survival. The remainder of the coins are denarii.

Septimius Severus, A.D. 193-211 (1).

2. *Obv.* IMP CAE L SEP SEV PERT AVG COS II. Head, laureate, r.

Rev. FELICIT TEMPOR. Corn-ear between crossed cornucopiae.

A.D. 194-5 (?). Eastern. M. & S. 373.

Julia Domna (1).

3. *Obv.* IVLIA AVGVSTA. Bust, draped, r.

Rev. IVNO REGINA. Juno, veiled, standing l., holding patera and sceptre; at her feet, l., a peacock.

c. A.D. 196-211. M. & S. 560.

Caracalla, A.D. 198-217 (1).

4. *Obv.* ANTONINVS PIVS AVG GERM. Head, laureate, r.

Rev. P M TR P XVIII COS IIII P P. Pax standing l. holding branch and sceptre.

A.D. 215. M. & S. 268.

Elagabalus, A.D. 218-222 (1).

5. *Obv.* IMP ANTONINVS PIVS AVG. Bust, laureate, draped, r.

Rev. LIBERTAS AVG. Libertas standing l., holding pileus and cornucopiae with star in field l.

M. & S. 111.

Julia Soaemias (1).

6. *Obv.* IVLIA SOAEMIAS AVG. Bust, draped, r.

Rev. VENVS CAELESTIS. Venus, diademed, seated l., holding apple and sceptre; at her feet, a child.

M. & S. 243.

Severus Alexander, A.D. 222-235 (8).

7-9. *Obv.* IMP C M AVR SEV ALEXAND AVG. Bust, laureate, draped, r.

Rev. PAX AVG. Pax running l., holding olive-branch and sceptre.

A.D. 222-228. M. & S. 168 (3 specimens).

10. *Obv.* IMP C M AVR SEV ALEXAND AVG. Bust, laureate, draped, r.

Rev. P M TR P II COS P P. Mars standing l., holding olive-branch and reversed spear (vertical).

A.D. 223. M. & S. 23 (but spear transverse).

11. *Obv.* IMP C M AVR SEV ALEXAND AVG. Bust, laureate, draped, r.

Rev. P M TR P III COS P P. Pax standing l., holding olive-branch and sceptre.

A.D. 224. M. & S. 40.

12. *Obv.* IMP SEV ALEXAND AVG. Head, laureate, r.

Rev. P M TR P VIII COS III P P. Mars walking l., holding in r. hand olive-branch and sceptre, and in l. spear and shield.

A.D. 229. M. & S. 92.

13. *Obv.* IMP ALEXANDER PIVS AVG. Bust, laureate, r., with traces of drapery on l. shoulder.

Rev. PROVIDANTIA (sic) AVG. Providentia (or Annona) standing l., holding two corn-ears and cornucopiae; on ground l., a modius.

Apparently an effort has been made on the die to obliterate the incorrect 'A'.

A.D. 231-235. M. & S. 250.

14. *Obv.* IMP C M AVR SEV ALEXAND AVG. Bust, laureate, draped, r.

Rev. PROVID DEORVM. Providentia standing l., holding in r. hand a wand over a globe, and in l. a sceptre.

Mint of Antioch. M. & S. 294.

Orbiana (1).

15. *Obv.* SALL BARBIA ORBIANA AVG. Bust, diademed, draped, r.

Rev. CONCORDIA AVGG. Concordia seated l., holding patera and double cornucopiae.

c. A.D. 225. M. & S. 319.

Julia Mamaea (1).

16. *Obv.* IVLIA MAMAEA AVG. Bust, draped, r.

Rev. IVNO CONSERVATRIX. Juno, diademed and veiled, standing l., holding patera and sceptre; at her feet, peacock.

M. & S. 343.

Maximinus I, A.D. 235-238 (2).

17-18. *Obv.* IMP MAXIMINVS PIVS AVG. Bust, laureate, draped, cuirassed, r.

Rev. PROVIDENTIA AVG. Providentia standing l., holding wand over globe, and cornucopiae.

c. March A.D. 235-c. January 236. M. & S. 13.

Gordian III, A.D. 238-244 (2).

19. *Obv.* IMP GORDIANVS PIVS FEL AVG. Bust, laureate, draped, cuirassed, r.

Rev. SALVS AVGVSTI. Salus standing r., feeding a serpent which she holds in her arms.

This coin is struck on a very large flan, 23 mm. at its greatest diameter.

Cohen 325.

20. *Obv.* IMP GORDIANVS PIVS FEL AVG. Bust, laureate, draped, cuirassed, r.

Rev. VENVS VICTRIX. Venus standing l., holding a helmet and a sceptre, and leaning on a shield.

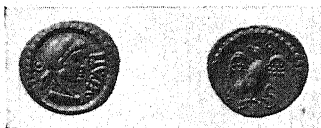
Cohen 347.

WILLIAM V. WADE.

MISCELLANEA.

SOME BRITISH AND ROMANO-BRITISH COINS.

(a) The following coin of the British ruler Epaticeus was found recently at Ashley Camp, near Stockbridge, Hants. By the kindness of its owner, Mr. Browning of Ashley, and through the good offices of Sir Norman Hill, Bart., of Stockbridge, it is now a loan-deposit in the Ashmolean Museum:



Obv. EPATI Head of Hercules r., wearing lion's skin: behind, ? an inverted *lituus*: border of dots.

Rev. Uninscribed: eagle, head l. and wings spread, standing facing, on serpent: above to r., pellet in circle: border of dots.

At \uparrow 13 mm., 1.32 gm. Cf. Evans, *Coins of the Ancient Britons*, Pl. VIII. 13; and G. C. Brooke's "Distribution, &c." in *Antiquity*, vii (1933), Pl. II. 43.

The coins of Epaticeus are sufficiently rare, and their distribution is so sporadic (see Brooke, *op. cit.*, pp. 285-6), that a new find-spot is worth recording. This Ashley specimen is in very fine condition.

(b) Recent purchases by the Ashmolean Museum included the following coin, found at Marcham, near Abingdon, Berks.

Obv. CVNO Winged bust, bare-headed and draped, r.: border of dots.

Rev. TASCIO Sphinx seated l.: border of dots.

R \leftarrow 13 mm., 1.29 gm. Cf. Evans, *op. cit.*, Pl. X. 9; Brooke, *op. cit.*, Pl. II. 44.

This coin, not in itself uncommon among the British series, falls well within the distribution-area of Cunobeline's coinage.

(c) Of the coins from Magna Castra Farm, Kenchester, which have from time to time been submitted for examination at the Ashmolean Museum, note has already been taken (*Num. Chron.*, 1937, p. 306) of a new naval type of Carausius. Another new Carausian type has now to be recorded as coming from this very prolific site:

Obv. QIMPCARAVSIVS [? P F AVG] Bust r., radiate, draped, cuirassed.



Rev. CVOTSVSC 2[—]AVG IIII (?): in exergue, C Togate figure, (?) veiled, standing l., holding patera in r. hand over lighted altar.

Æ √ 23.5 mm., 3.11 gm.

The precise interpretation of this reverse-legend must remain to some extent conjectural. Unfortunately the coin has suffered damage at one point of its circumference, so that the letters immediately following *Vot. Susc.* are quite lost; and the termination *Aug. IIII* appears therefore to be difficult to explain, unless the missing portion of the legend contains a numeral such as XX (cf. Mattingly and Sydenham, *Roman Imperial Coinage*, v, part 2 [P. H. Webb], p. 514, nos. 595–6), and the remaining letters are to be read as an unskilled effort to represent the words AVG. IMP. The general workmanship of the coin—and of the obverse especially—is by no means accomplished.

The drawing of the reverse, here reproduced, was made by Mr. Anthony Thompson: a cast of the reverse is in the Ashmolean Museum.

(d) By the kindness of Mr. A. D. Passmore, of Wanborough, Swindon, I am able to publish and to illustrate

a remarkable radiate imitation, found at Wanborough, and now in his possession :



Obv. Traces of legend. Barbarous radiate head, r.

Rev. Horse with rider, running r. : the body of the horse is "shaded" with parallel hatchings : the rider, very diminutive in proportion and apparently lacking legs, seems to hold a short spear or sword : under the horse, a legend resembling the numerals 930.

Æ ↑ 15 mm., 1.42 gm.

Animal-types are not commonly found on coins imitated from the third-century Roman radiate series (see my *Coinage and Currency in Roman Britain*, p. 148 f.), and it is therefore of some interest to be able to add so conspicuous an example as this. The coin, if crude, is vigorously executed, and the zebra-like design of the reverse forms an excellent decorative pattern.

I am indebted to Mr. Passmore for a photograph of his coin.

C. H. V. SUTHERLAND.

ERRATA

PAGE 184, lines 10 and 11 from foot, *for* Yield Hill *read* Yield Hall.

REVIEWS.

The Composition of Ancient Greek Bronze Coins, by EARLE REDCLIFFE CALEY. Pp. viii+203, with four plates. American Philosophical Society (*Memoirs*, vol. xi), Independence Square, Philadelphia, 1939. \$2.50.

It will be clear from the title that this is no easy book to review: yet its appearance is so welcome to numismatists that it must not be passed over unnoticed. Professor Caley presents us with exact analyses of Greek coins of various ages and places—Macedon, Athens, Sicyon, Corinth, Syria, and Egypt among them. To the analysis he has added studies of the microstructure of his coins. To ensure that the exactness of the analysis shall not be spoiled by inexactness on the other side, he has taken pains to have all his coins carefully identified and dated. The result is that we now have a solid body of reliable material on which to found our results.

The most noticeable fact that emerges is that the percentage of tin and lead in Greek bronze varies very considerably and that a large percentage of lead—a very cheap metal—is normally a sign of late date. A special chapter (VI) on the composition of Roman coins of alloyed copper shows surprisingly large amounts of lead in issues of the third century B.C. Roman alloyed copper, in general, tends to differ from contemporary Greek.

Study of microstructure is mainly useful for determining whether a coin was cast, struck, or produced by a combination of the two processes. The dendritic structure is a clear sign of casting.

So much for the present: looking to the future, it must be emphasized that research of this kind is of very high value and deserves all possible encouragement. Minute and accurate study of detail will not in itself lead to very extensive results: to obtain them, the wide view and the synthesizing imagination will always be needed. But results so obtained need to be checked before they can be used with confidence and work like that given us by Professor Caley makes this essential check possible.

HAROLD MATTINGLY.

Catalogue of Coins in the Indian Museum. Supplement to Vol. II. Pp. viii+157; 5 plates; 10s. *Supplement to Vol. III.* Pp. viii+240; 3 plates; 15s. Both by SHAMSUDDIN AHMAD. Delhi, Manager of Publications, 1939.

THESE two volumes describe over 8,000 medieval Muhammadan and Mughal coins acquired by the Indian Museum, Calcutta, since the publication of Mr. Nelson Wright's volumes in 1907 and 1908. They are described as far as possible by reference to the existing catalogue: important new coins are specially noted and illustrated in the plates. Many notable coins have been added, especially in the medieval series, which had weak points in the old collection. Mr. Shamsuddin Ahmad has performed his task very thoroughly and all interested in the Muhammadan period of Indian history will be glad to have his two volumes for reference.

J. A.

Greek and Roman Coins and the Study of History. By J. G. MILNE. Pp. vi+128; 15 plates. Methuen, 1939. 5s.

THIS little book is intended to do something to make ancient coins better known as aids in the teaching of history by calling attention to the kind of evidence to be derived from them. After dealing briefly with the nature of coinage Dr. Milne discusses the metals used and their sources and varying market values. The history of debasement in the ancient world is then briefly surveyed. Technical problems like dies, fabric and types, and mints and their output, and the evidence, chronological and geographical, yielded by them are discussed. The historical importance of countermarks is pointed out, the complicated history of ancient standards briefly surveyed and the main denominations traced through the ancient world. A concluding chapter deals with the important question of hoards; the various methods of formation of a hoard are analysed and guidance given as to what are legitimate deductions from a hoard. The book, which is illustrated by fifteen well-chosen plates, should do much to attract attention to the historical importance of ancient coinages and to encourage wider reading on the many interesting points which considerations of space enable the author to do little more than raise.

J. A.

INDEX.

A.

- 'Adan, South Arabian mint, 75-80
 Aemilianus, chronology of issues of, 60
 Ahmad, Shamsuddin. Notice of his *Supplements* to Ind. Mus. Cat. II and III, 294
 Alexius I, nomisma of, with Irene and John II, 107
 'Ali Dinār of Darfur, coinage of, 149-161
 ALLAN, JOHN
 Notice of *Suppl. to Ind. Mus. Cat. II and III*, 294
 — J. G. Milne, *Greek and Roman Coins*, 294
 ALLEN, DEREK F.
 The La Marquanderie Hoard of Armorican Coins, 180-182
 A Sterling of Sancho II of Portugal, 182
 Some Civil War Hoards, 183-184
 Aninetus (Lydia), coin of, 185
 Apollonshieron, coin of, 185
 ARKELL, A. J.
 The Coinage of 'Ali Dinār of Darfur, 149-161
 Ashampstead find, 184
 Ashbrook (Glos.) find, 183
 Ashley Camp, coin of Epatiecus from, 290
 Ashmolean Museum, Greek coins in, 185-198; Roman coins in, 216-222
 Ashover hoard, 285
 Athens, find of coins of, 162-165
 Attalea (Lydia), coin of, 186
 Augustus, rare coins of, 216-217
 Ayyūbids of the Yaman, history and coinage of, 62-97; find of coins of, 64-80; mints of, 83-87; history of, 87-97; genealogical table, 94

B.

- Bagis (Lydia), coins of, 186
 Blaundus (Lydia), coins of, 186
 Boeotia, coins of, in Elis find, 249

- Bolar (Nuits St. Georges), Roman coins found at, 31

C.

- Caley, E. R. Notice of his *Composition of Greek Bronze Coins* p. 293
 Caligula, rare coin of, 217
 Carausius, coin of, from Magna Castra, 291
 Catford find, 183
 Chesterfield find (English), 183; (Roman), 284-289
 Childrey Manor, *see* Wantage
 Cilbiani (Lydia), coins of, 187
 Claudius, rare coin of, 217-218
COMOB on coins of Theodosius I, 167-168
 "Concordia" solidi of Theodosius I, 199-216
CONOB on coins of Theodosius I, 201-210
 Constans, medallion of, 144
 Constantine I, medallion of, 145
 — II, new medallion of, 143-145
 Constantinople, mint of Theodosius I, 199-215
 Cornelia Supera, coins of, 24-36
 Couvron, Roman coins from, 31
 Cunobeline, coin of, from Marcham, 290-291

D.

- Darfur, the coinage of, 149-161
 Dewsbury, find of Roman coins, 104
 Dioshieron, coins of, 187-188
 Doncaster (Edlington) find, 32
 Dorchester, hoard of Roman coins from, 21-61; details, 22-29; nature of find, 31-41

E.

- Edlington (Doncaster) find, 32
 El-Fasher, mint of Darfur, 149-161
 Elis, fifth-century drachms of, 13-15; hoard of late drachms of, 239-265; list of, 241-249

classification of, 249-253; types of, 253-256; weights of, 256-258; date of, 260-262
 Epaticcus, coin of, from Ashley Camp, 290

F.

Farley Hill find, 173-175
Fel. Temp. Reparatio type, 267-270, 275-280
 FINDS OF COINS.
 Ashampstead, Reading (Elizabeth-Charles I), 183
 Ashbrook, Glos. (Edward VI-Charles I), 183
 Ashley Camp (Epaticcus), 290
 Ashover (Roman), 285
 Catford, Kent (James I-Charles I), 183
 Chesterfield (Vicar Lane), Derby (Elizabeth-Charles I), 183
 — (Prestige), Derby (Elizabeth-Charles I), 183
 — Brockwell (Hadrian-Gordianus III), 284-289
 Covesea (Roman), 276, 280, 281
 Dewsbury (Otho-M. Aurelius), 104
 Dorchester (Caracalla-Valerian II), 21-61
 Elis, coins of, 238-265
 Farley Hill, Berks. (Gallienus-Tetricus II), 169-170
 Hadfield (Elizabeth-Charles I), 183
 Headington (Elizabeth-Charles I), 184
 Jabling (Roman), 140-141
 Knapwell, Cambs. (Vespasian-Verus), 175-177
 La Marquanderie (Gaulish), 180-182
 Leicester (Mary-Charles I), 184
 Lydney (Roman), 139-141, 170
 Magna Castra, Kenchester (Carausius), 291
 Marcham, near Abingdon (Cunobeline), 290-291
 Muckleford (James I-Charles I), 184
 Peloponnesus (Greek), 18-19
 Piraeus (Athens and Pontus), 162-166
 Platana (Trebizond), 120-127

Poughill (Vespasian-M. Aurelius), 170-175
 Prestatyn (Mary-Charles I), 184
 Richborough (Minimi), 112-119
 Shapwick III (Valentinianian), 128-142
 Tel Atchana (Byzantine), 178-180
 Wanborough (radiate), 291-292
 Wantage (James I-Charles I), 184
 Wimblington (Gallienus-Tetricus II), 177-178
 Yield Hall (Reading) (James I-Charles I), 184, 292

G.

Galba, rare coins of, 220-221
 GARDNER, G. B.
 More Coins from the Johore River, 98-103
 GOODACRE, HUGH.
 Irene Dukaina, 105-111
 Gordian III, chronology of issues of, 47-50
 Gordus, coin of, 188
 Gorgoneion on coins of Melos, 19-20
Gloria Exercitus series of Constantinian medallions, 142-148

H.

Hadleigh find, 183
 Headington find, 184
 Hermocapelia (Lydia), coins of, 188
 Hypaepa (Lydia), coins of, 189-190

I.

Irene Dukaina, coinage of, 105-111

J.

Jabling hoard, 140-141
 John II Comnenus, coins of, with his father, 107-108
 John I of Trebizond, coins of, 120-123
 — II of Trebizond, coins of, 126-127
 Johore river, coins from, 98-103

K.

- Kessel, unique Roman medallion from, 143-148
 Kilwa, coins of, 225-227
 Knapwell (Cams.) find, 175-177

L.

- La Marquanderie (Jersey) find, 180-182
 Leicester find, 184
 Lydia, coins of, in Oxford, 185-198
 Lydney find, 139-141, 270

M.

- Macedonia, uncertain coins of, 5-10; a didrachm of, under Rome, 2-3
 Maconia, coins of, 190-191
 Magna Castra Camp, coin of Carausius from, 291
 Magnesia ad Sipylum, coin of, 191
 Malik al-'Adil, a Malay title, 100-101

MATTINGLY, HAROLD.

- The Great Dorchester Hoard of 1936, 21-61
 The Dewsbury Hoard, 104
 The Platana Hoard of Aspers of Trebizond, 120-127
 A Byzantine Hoard from Tel-Atchana, 178-181
 Notice of Denis van Berchen, *Les Distributions de Blé, &c.*, 232
 Barbarous overstrikes found in fourth-century hoards, 280-282
 — and W. P. D. STEBBING.
 Site-Finds from Richborough, 112-119

Manuel I of Trebizond, coins of, 123-126

Melos, early stater of, 19-20

Methylum, obols of, 10-12

MILES, GEORGE C.

The Ayyūbid Dynasty of the Yaman and their Coinage, 62-97

MILNE, J. GRAFTON.

Greek Coins in the Oxford Collections: (5), Lydia, 185-198

Notice of his *Greek and Roman Coins*, 294

Minimi from Richborough, 112-119

Mithradates of Pontus, tetradrachm of, 164

Mostene (Lydia), coins of, 191

Muckleford, find of English coins, 184

N.

Nero, rare coins of, 218-220

NOTICES OF BOOKS.

Ahmad, Shamsuddin, *India Mus. Catalogue, II and III, Suppl.*, 294

Van Berchem, *Les Distributions de Blé*, 232

Caley, E. R., *Composition of Greek Bronze Coins*, 293

Milne, J. G., *Greek and Roman Coins and the Study of History*, 294

Nysa, coins of, 191-192

O.

Öesod hoard, 141

OMAN, C. C.

Some Contemporary Imitations of Medieval Coin Motifs, 223-238

Overstrikes on Roman Coins, 41-46, 266-283

P.

PEARCE, J. W. E.

The Gold Coinage of Theodosius I, Addendum, 167-168

Shapwick III, A large Hoard of Valentinianian Aes. 128-42

Barbarous Overstrikes found in fourth-century Hoards, 266-280

"*Concordia*" *Solidi* struck at Constantinople by Theodosius I, 199-215

Peirasia, obol of, 12-13

Peloponnesus, fourth-century hoard from, 18-19

Petsalis, Professor, coins in the collection of, 2, 5, 6, 7, 12, 13, 15, 19

Philadelphia, coins of, 192

Philip I, chronology of issues of, 50-55

Phyllos, Apollo of, on a coin of Peirasia, 18

Piraeus find, 162-166

Platana hoard, 120-127

Plevna hoard, 37
 Poughill find, 173-175
 Prestatyn hoard, 134
 Probus, "radiate" copies of coins
 of, 228-231
 Protesilaos on coins of Scione,
 3-4

R.

Raydah, a South Arabian mint,
 68
 Reading finds, *see* Ashampstead
 and Yield Hall
 Richborough, coins from, 112-119
 ROBERTSON, Miss ANNE.
 A Hoard of Denarii from Knap-
 well (Cambs.), 175-176
 A Roman Coin Hoard from
 Wimblington (Cambs.), 177-
 178
 Rufinus, prefect, rescript of, 282-
 283

S.

Sabinia Tranquillina, coins of,
 24, 36
 Saif al-Dīn Abū Bakr Yūsuf,
 coins of, 79-80; identity of, 96
 Salāh al-Dīn Yūsuf, coins of, 66-
 78
 San'a', South Arabian mint, 74-78
 Sarden, coins of, 193-194
 Scione, tetrobols of, 3-5
 SCHWABACHER, WILLY.
 Contributions to Greek Numis-
 matics, 1-20
 A Find from the Piraeus, 162-
 166
 A Hoard of Drachms of Elis,
 239-265
 Sermylia, coin wrongly attri-
 buted to, 10
 Shapwick III hoard, 128-142
 Signay l'Abbaye find, 32
 Silandus (Lydia), coin of, 194
 Smederevo find, 32
 STEBBING, W. P. D., *see* MATTINGLY,
 HAROLD.
 Stratonicea, coins of, 195
 al-Sultan al-ʿAdil, a Malay title,
 100-101
 SUTHERLAND, C. H. V.
 A Berkshire Hoard of Roman
 Coins, 169-170
 The Poughill (Devonshire)
 Hoard of Roman Coins, 170-
 175

The Coinage of Probus as a
 Model for Radiate Imitations,
 223-231

Roman Imperial Coins in the
 Oxford Collection (I), 216-222
 Some Ancient British and
 Romano-British Coins, 290-
 292

T.

Ta'izz, a South Arabian mint,
 64-65, 66-67, 83-84
 Tegea (Arcadia), stater of, 15-19
 Tel Atchana hoard, 179-180
 Theodora of Trebizond, coins of,
 127
 Thunderbolt on coins of Elis,
 255-256
 Thyatira, coins of, 196-197
 TOYNBEE, Miss J. M. C.
 A New Gold Medallion of Con-
 stantius II, 143-148
 Trajan Decius, chronology of
 coins of, 55-58
 Tralles, coins of, 196-197
 Tripolis (Lydia), coins of, 197

V.

Van Berchem, Notice of his *Les
 Distributions de Blé*, 232
 Vitellius, rare coins of, 222

W.

WADE, WILLIAM V.
 A Hoard of Roman Coins from
 Chesterfield, N. Derbyshire,
 284-289
 WALKER, JOHN.
 Some New Coins from Kilwa,
 223-227
 Wanborough, radiate coins from,
 291-292
 Wantage find, 184

Y.

Yaman, Ayyūbid coins of, 62-97
 Yield Hall (Reading) find, 184,
 292

Z.

Zabid, South Arabian mint, 65-
 68, 74, 85-87

Plevna hoard, 87
 Poughill find, 173-175
 Prestatyn hoard, 184
 Probus, "radiate" copies of coins of, 228-231
 Protesilaos on coins of Scione, 3-4

R.

Raydah, a South Arabian mint, 68
 Reading finds, *see* Ashampstead and Yield Hall
 Richborough, coins from, 112-119
 ROBERTSON, Miss ANNE.
 A Hoard of Denarii from Knapwell (Cambs.), 175-176
 A Roman Coin Hoard from Wimblington (Cambs.), 177-178
 Rufinus, prefect, rescript of, 282-283

S.

Sabinia Tranquillina, coins of, 24, 36
 Saif al-Dīn Abū Bakr Yūsuf, coins of, 79-80; identity of, 96
 Ṣalāḥ al-Dīn Yūsuf, coins of, 66-78
 San'a', South Arabian mint, 74-78
 Sardes, coins of, 193-194
 Scione, tetrobols of, 3-5
 SCHWABACHER, WILLY.
 Contributions to Greek Numismatics, 1-20
 A Find from the Piraeus, 162-166
 A Hoard of Drachms of Elis, 239-265
 Sermylia, coin wrongly attributed to, 10
 Shapwick III hoard, 128-142
 Signay l'Abbaye find, 32
 Silandus (Lydia), coin of, 194
 Smederevo find, 32
 STEBBING, W. P. D., *see* MATTINGLY, HAROLD.
 Stratonicea, coins of, 195
 al-Sultan al-ʿĀdil, a Malay title, 100-101
 SUTHERLAND, C. H. V.
 A Berkshire Hoard of Roman Coins, 169-170
 The Poughill (Devonshire) Hoard of Roman Coins, 170-175

The Coinage of Probus as a Model for Radiate Imitations, 228-231
 Roman Imperial Coins in the Oxford Collection (I), 216-222
 Some Ancient British and Romano-British Coins, 290-292

T.

Ta'izz, a South Arabian mint, 64-65, 66-67, 83-84
 Tegea (Arcadia), stater of, 15-19
 Tel Atchana hoard, 179-180
 Theodora of Trebizond, coins of, 127
 Thunderbolt on coins of Elis, 255-256
 Thyatira, coins of, 196-197
 TOYNEEE, Miss J. M. C.
 A New Gold Medallion of Constantius II, 143-148
 Trajan Decius, chronology of coins of, 55-58
 Tralles, coins of, 196-197
 Tripolis (Lydia), coins of, 197

V.

Van Berchem, Notice of his *Les Distributions de Blé*, 232
 Vitellius, rare coins of, 222

W.

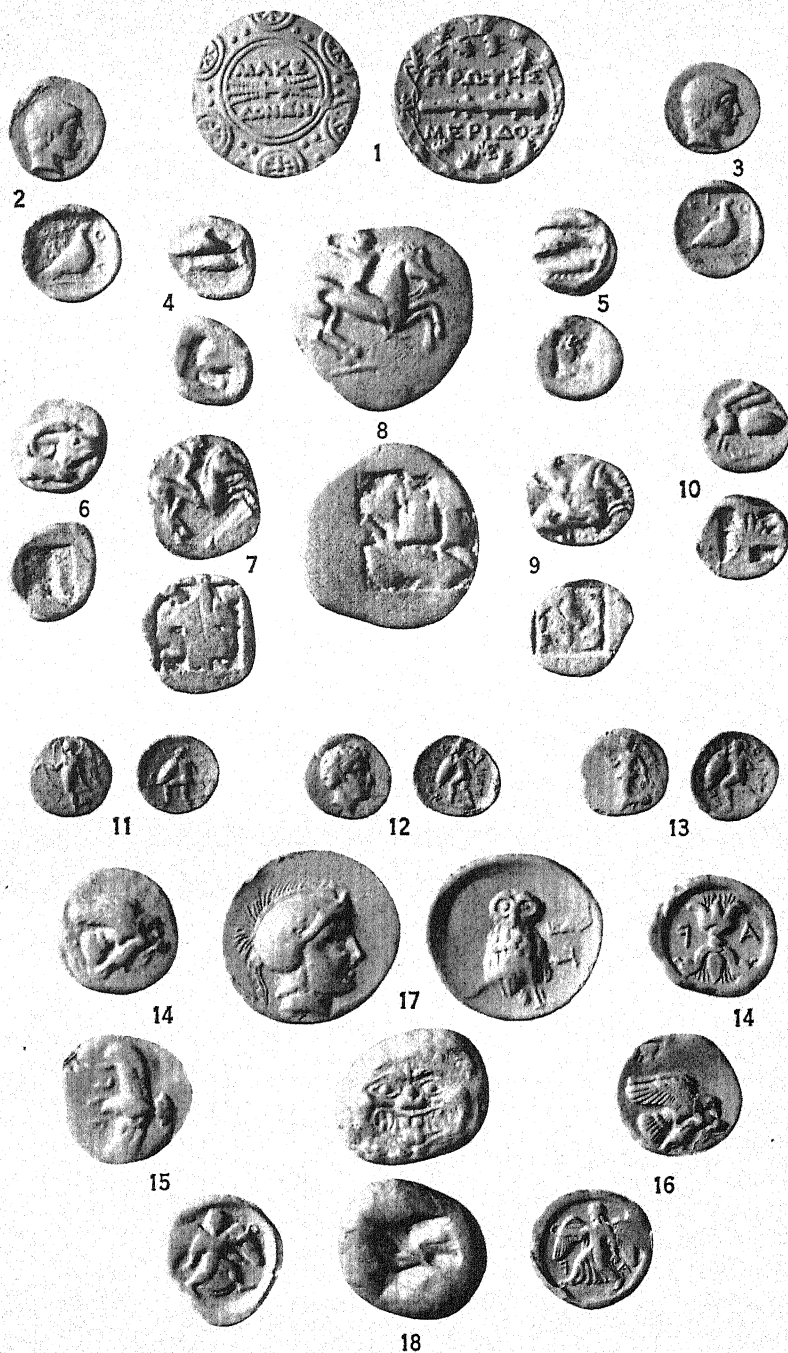
WADE, WILLIAM V.
 A Hoard of Roman Coins from Chesterfield, N. Derbyshire, 284-289
 WALKER, JOHN.
 Some New Coins from Kilwa, 228-227
 Wanborough, radiate coins from, 291-292
 Wantage find, 184

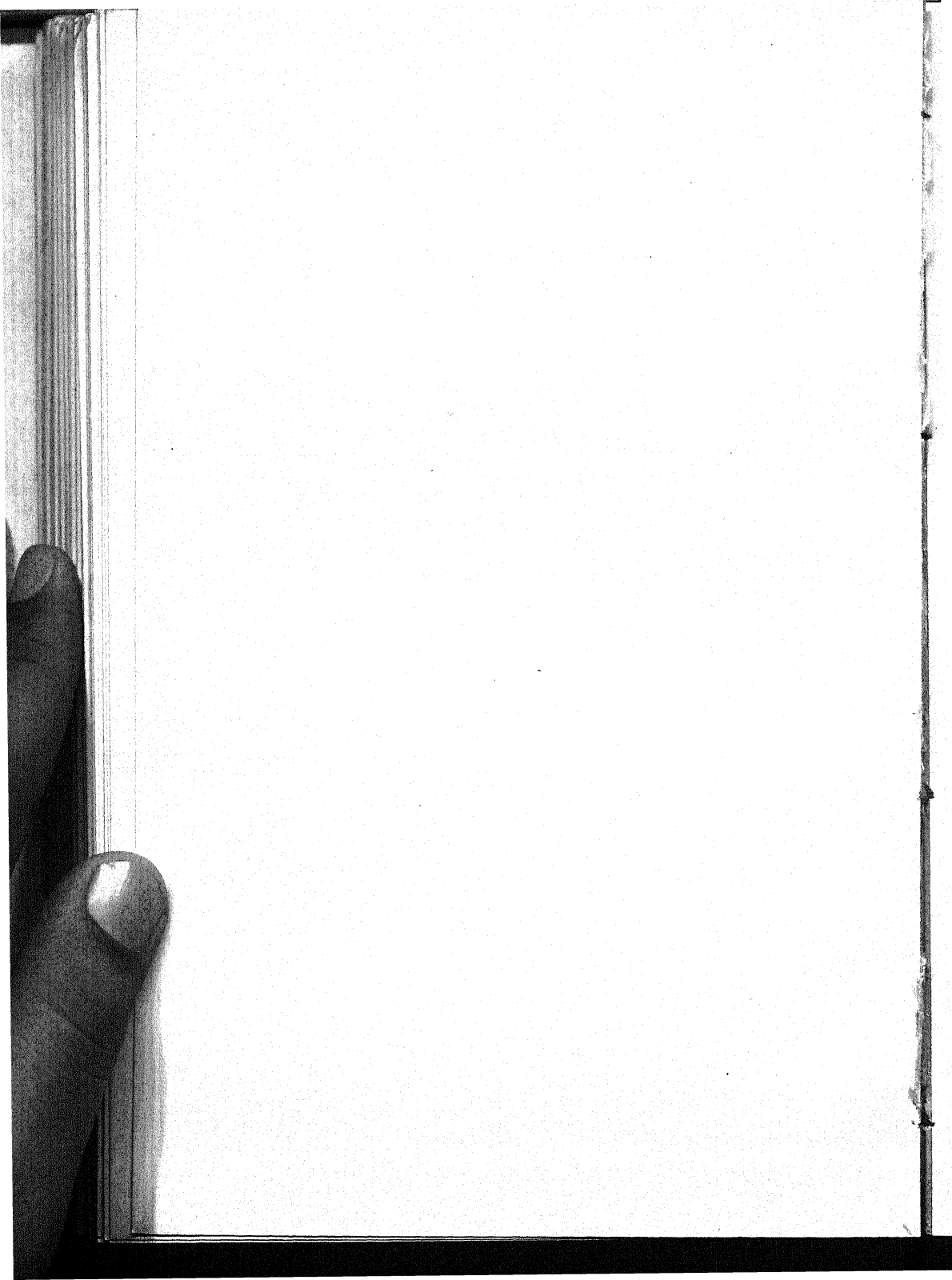
Y.

Yaman, Ayyūbid coins of, 62-97
 Yield Hall (Reading) find, 184, 292

Z.

Zabīd, South Arabian mint, 65-68, 74, 85-87







1



2



3



4



5



6



7



8



9



10



11



12

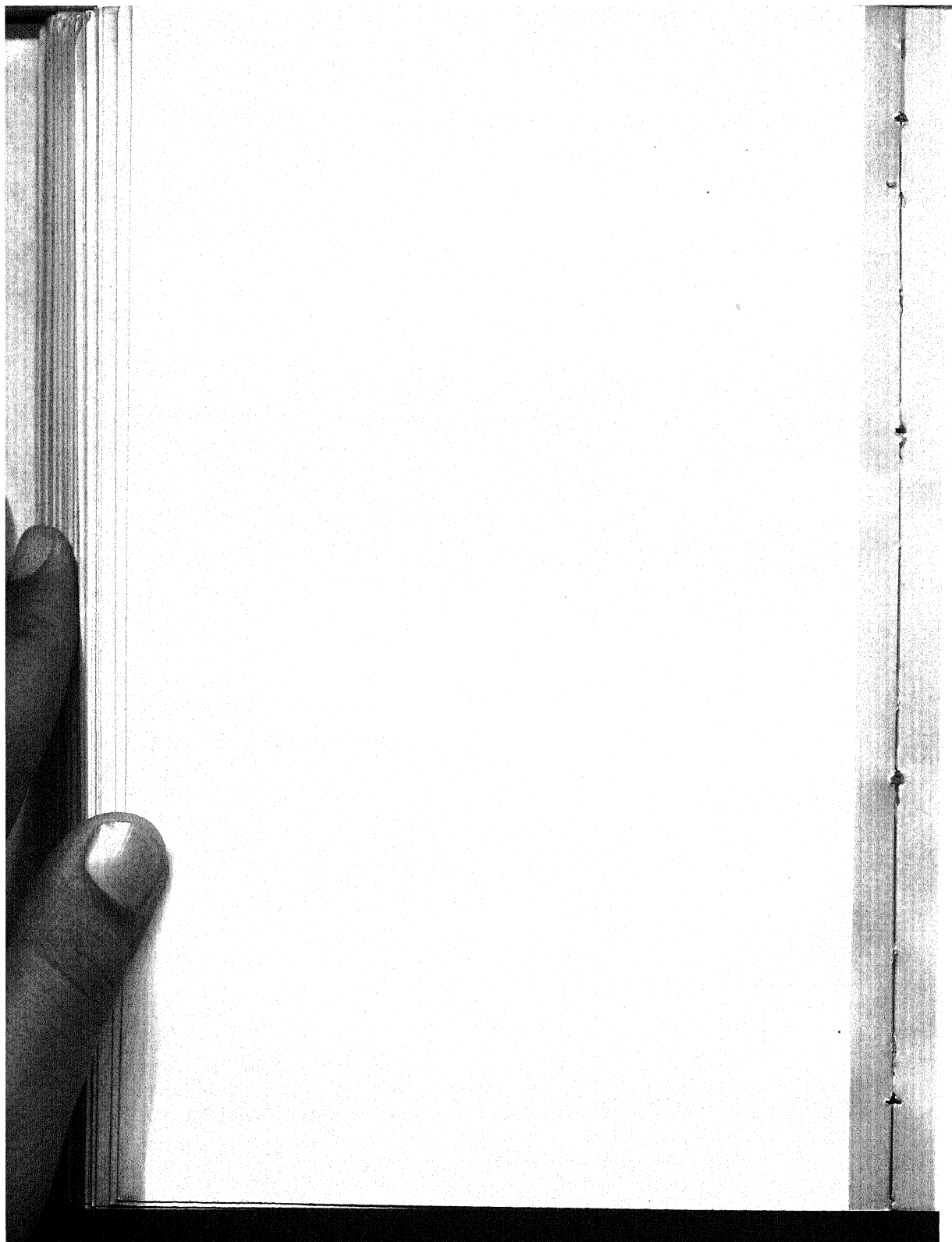


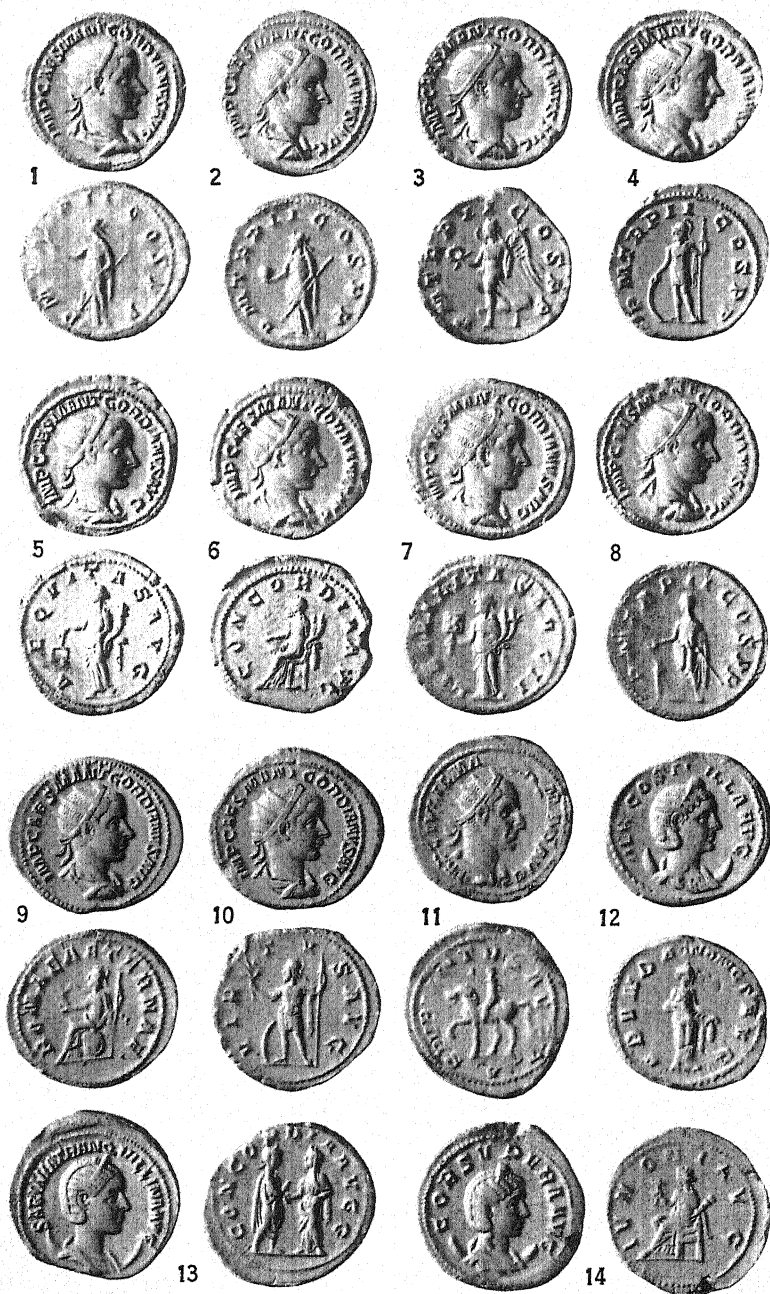
13

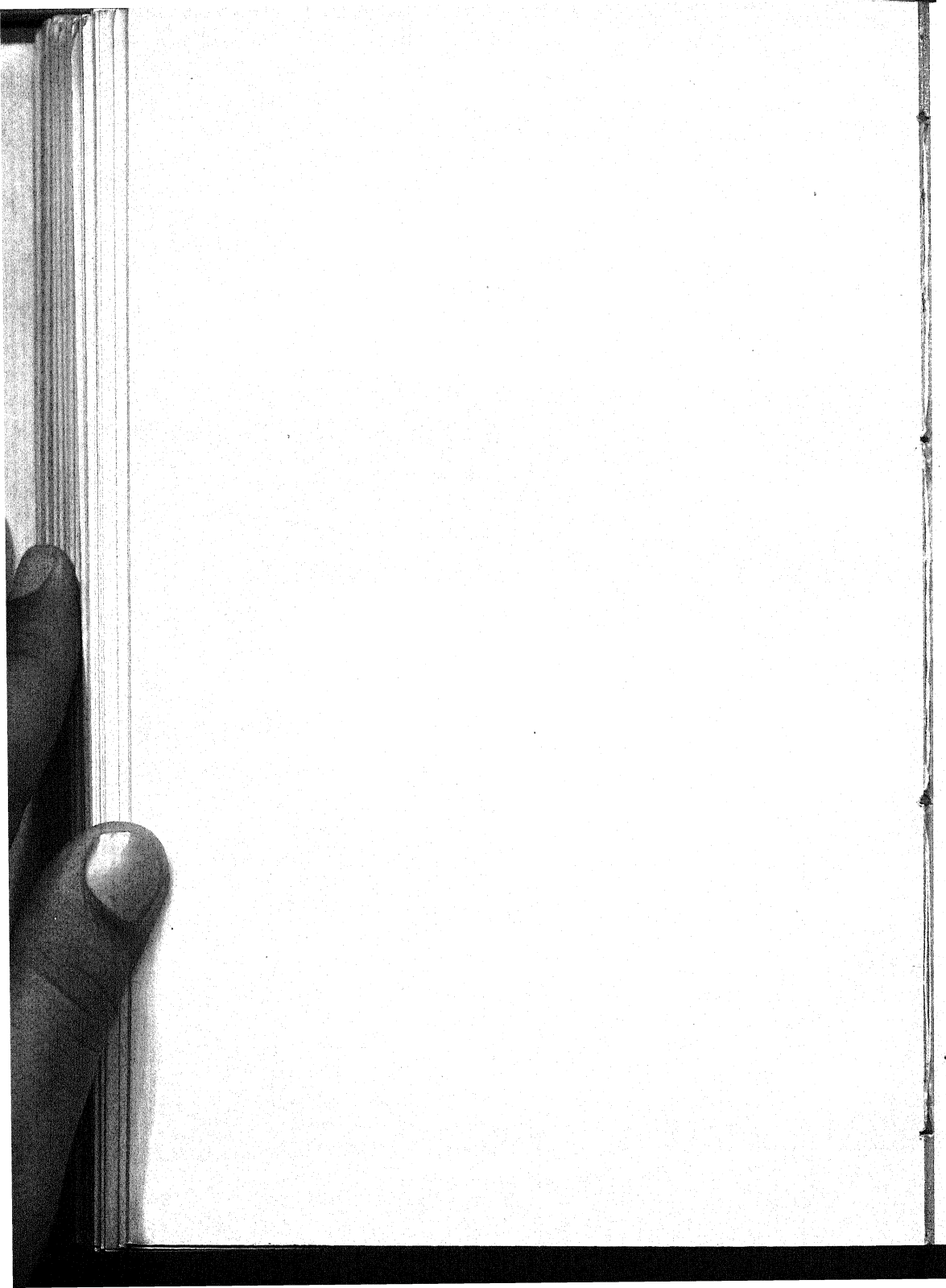


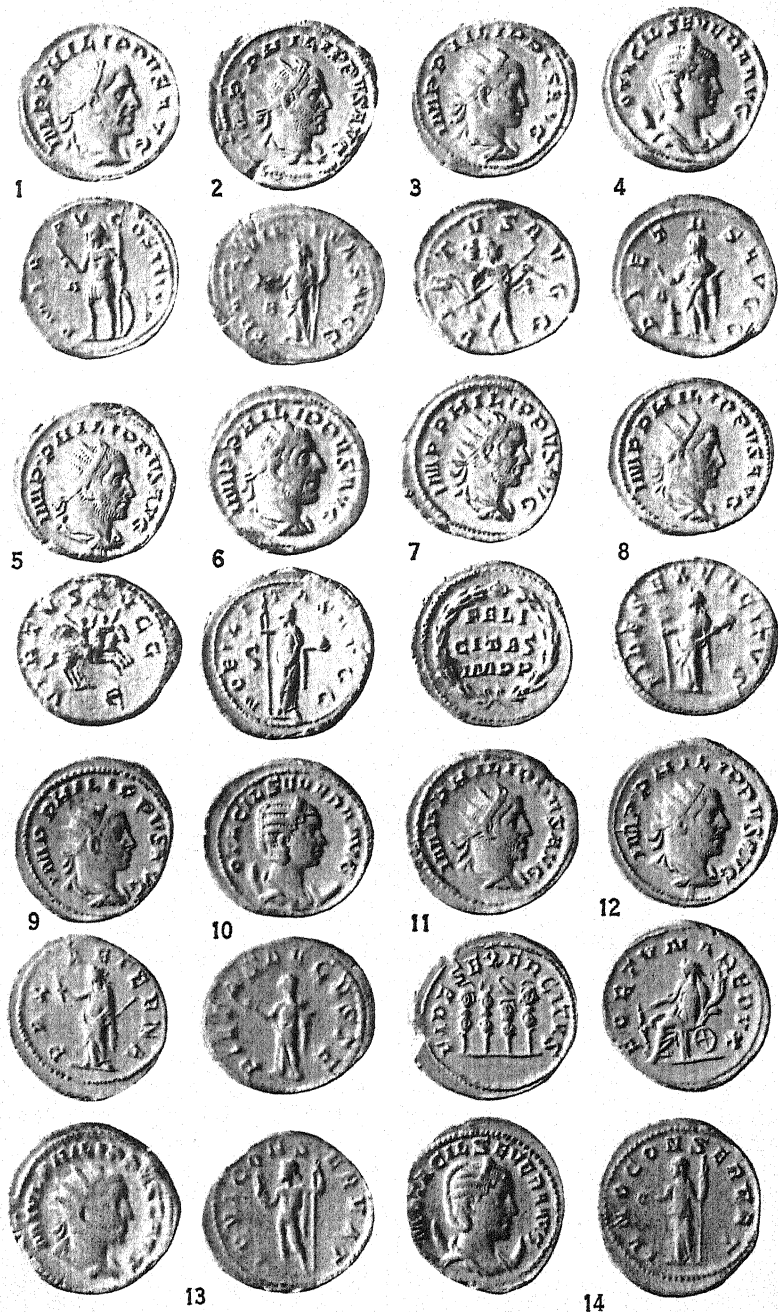
14

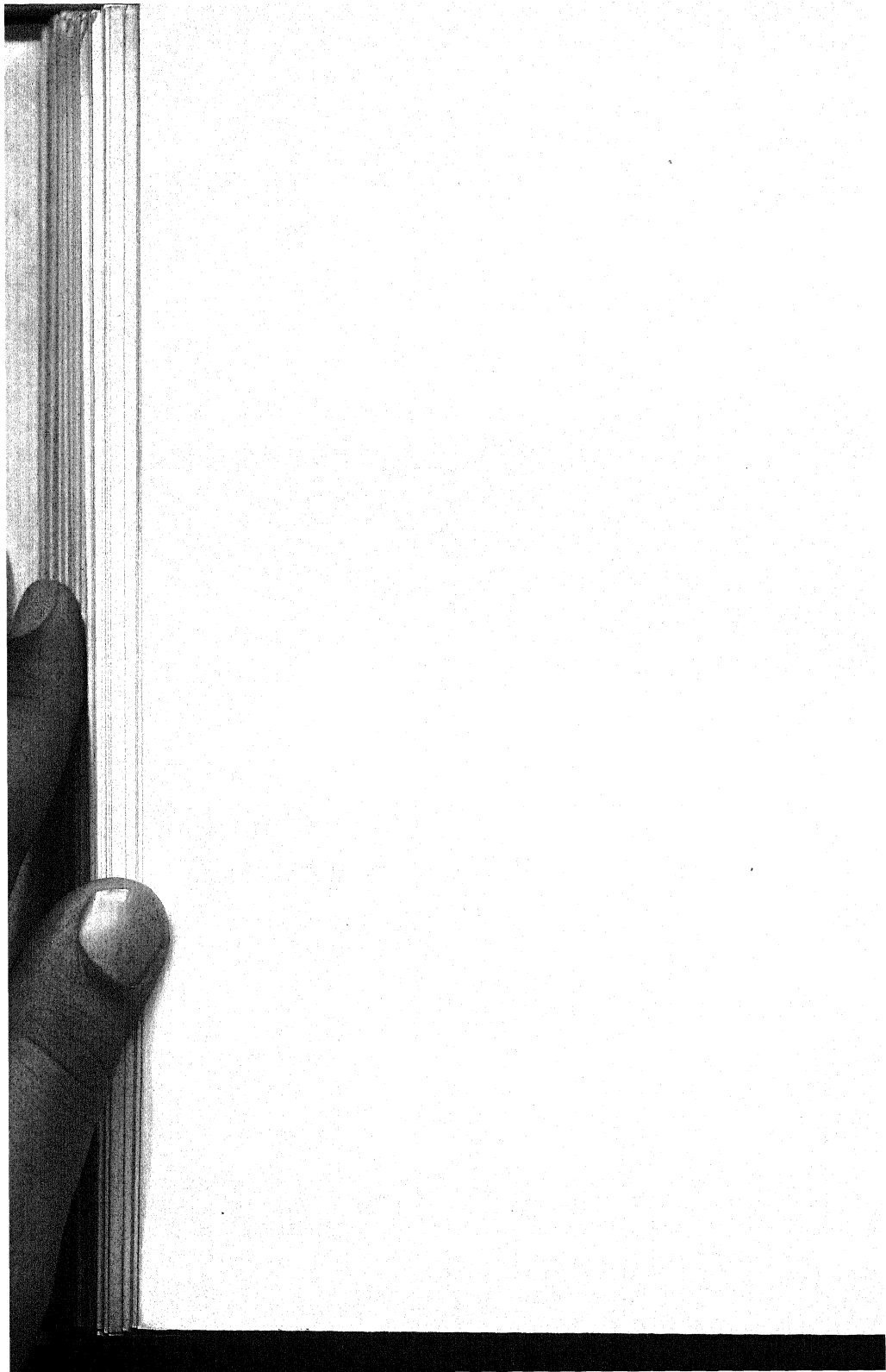


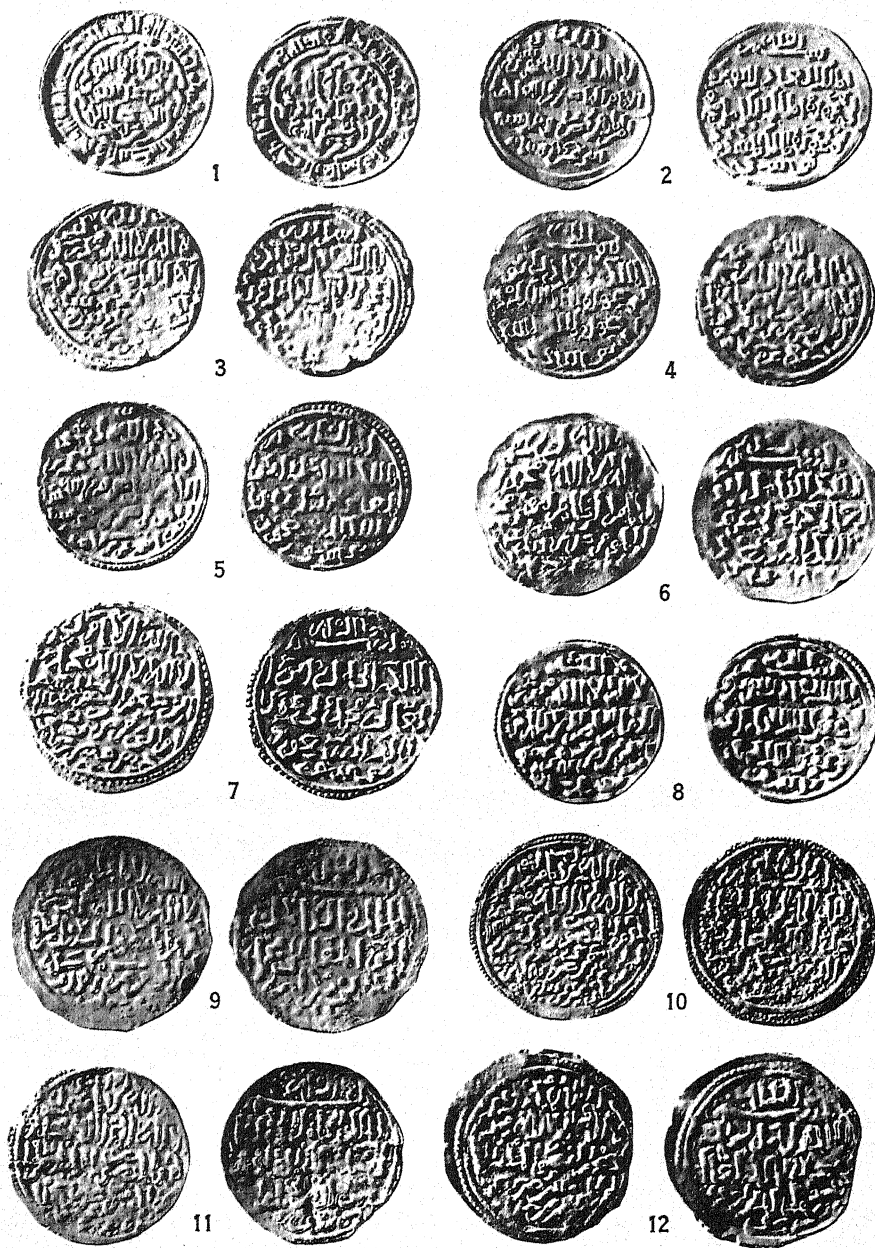




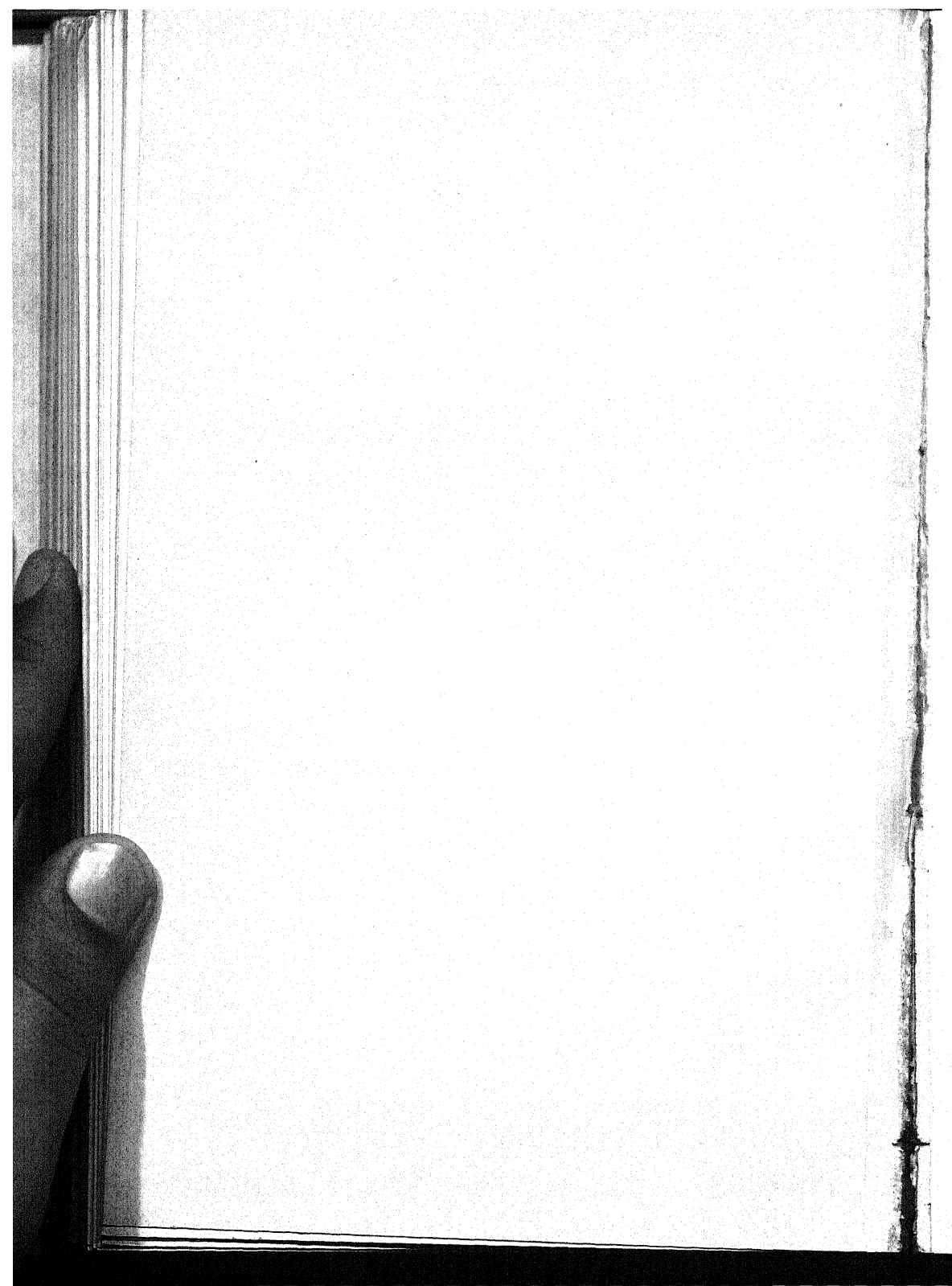


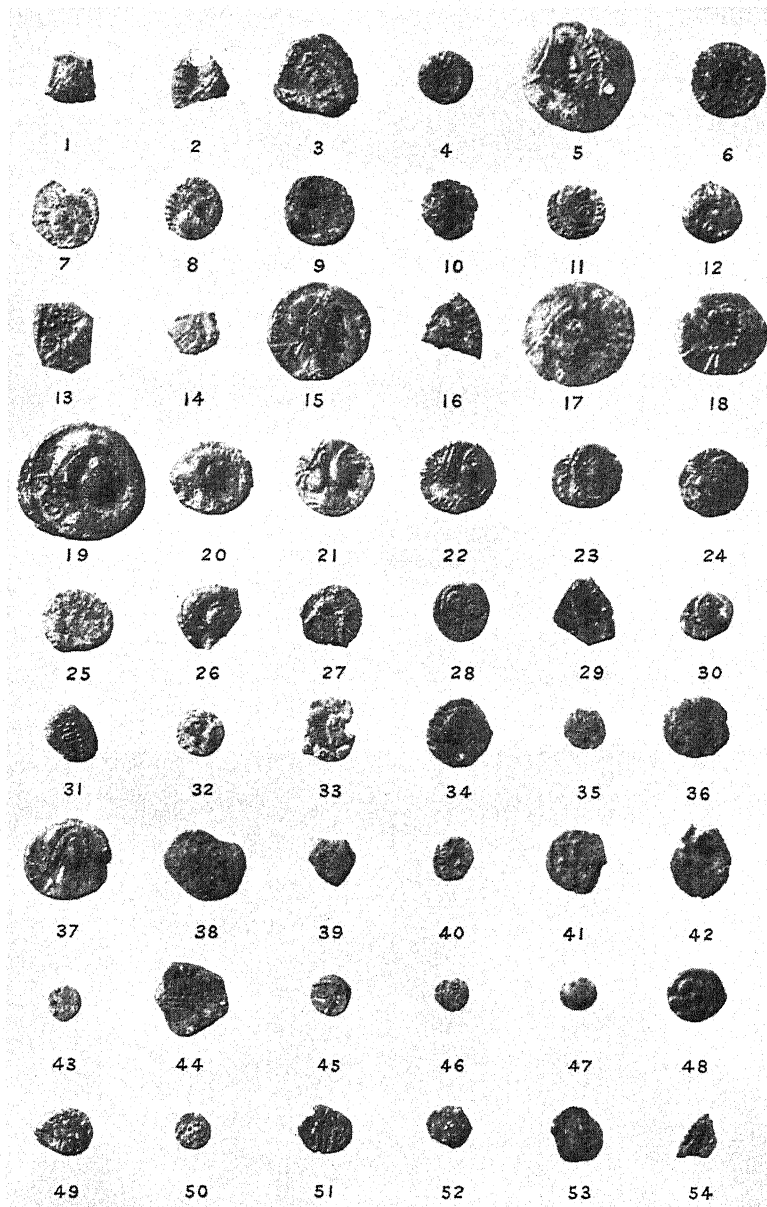




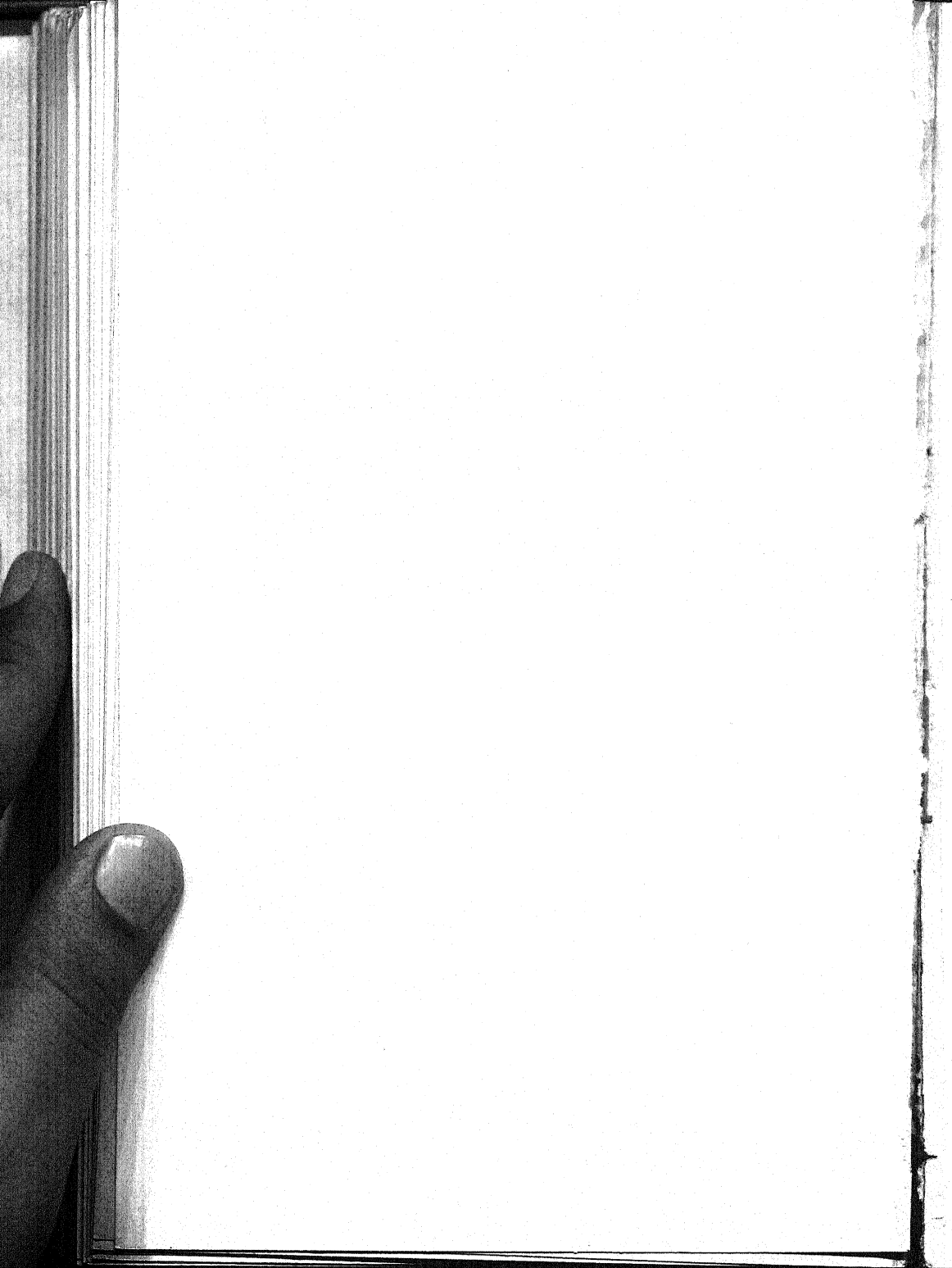


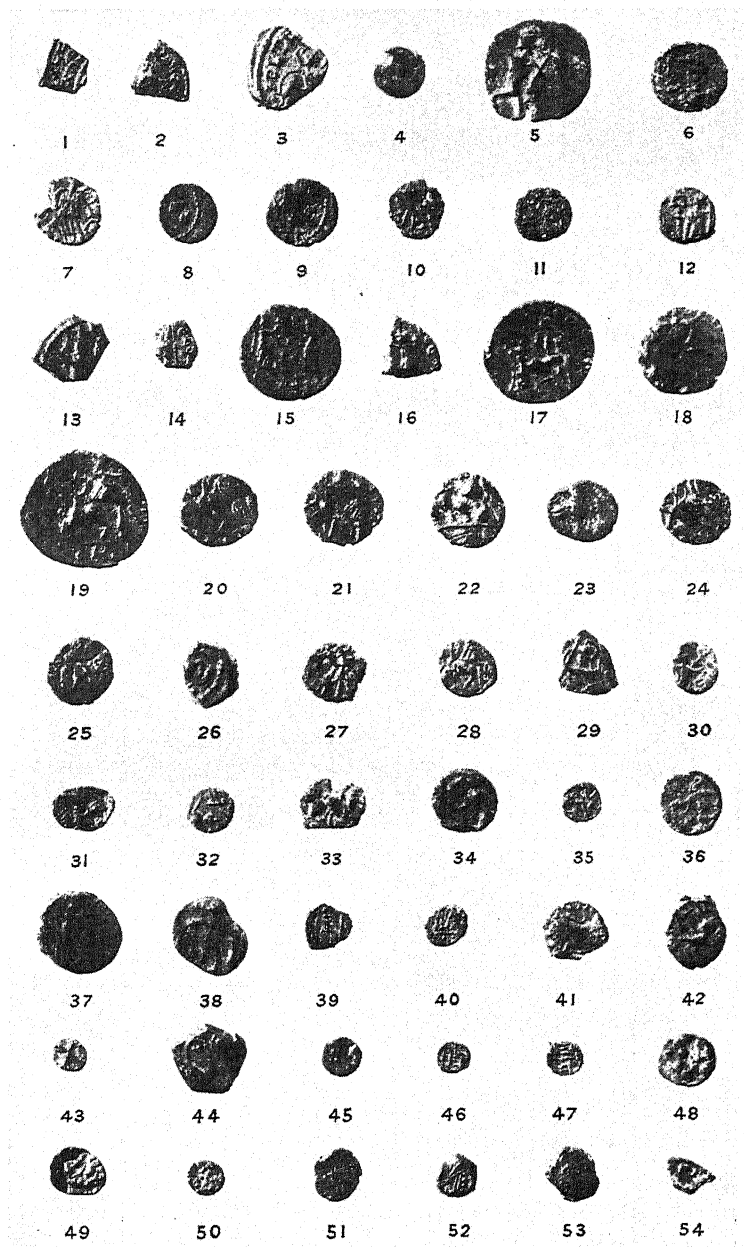
AYYUBID DYNASTY OF THE YAMAN



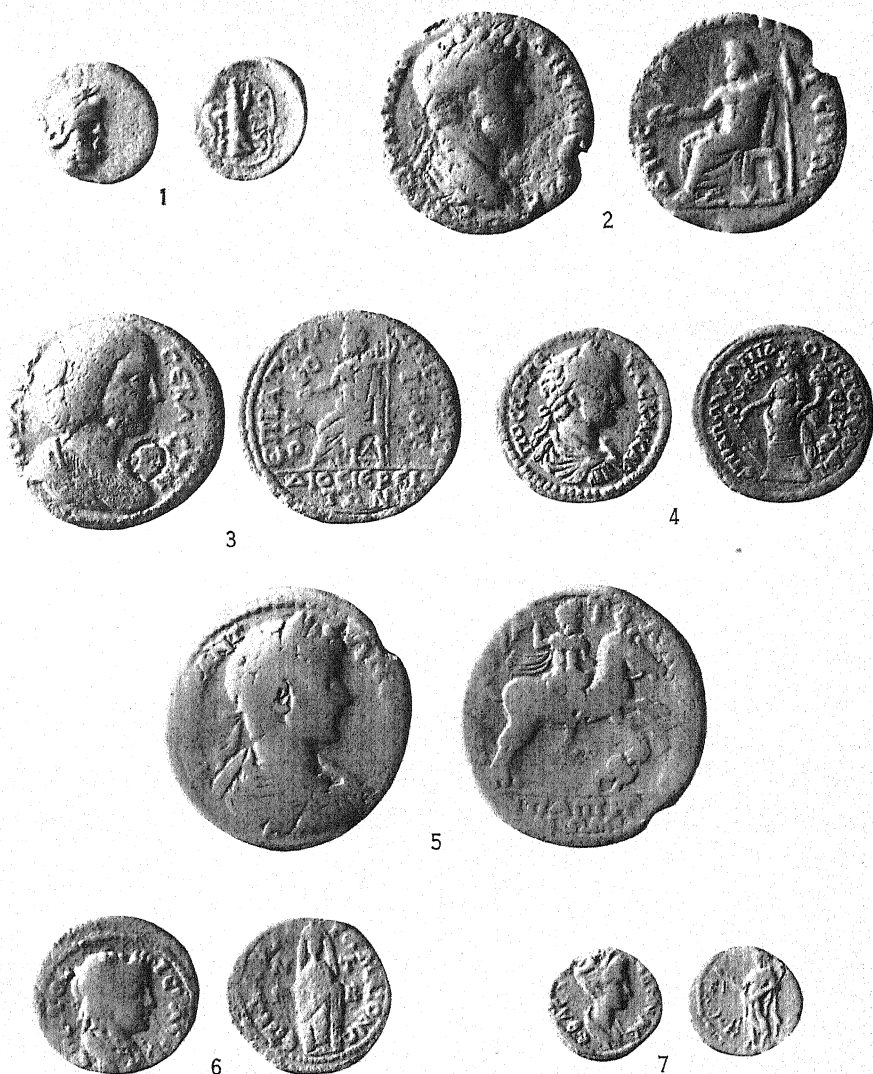


SITE-FINDS FROM RICHBOROUGH: OBVERSES





SITE-FINDS FROM RICHBOROUGH: REVERSES



GREEK COINS IN THE OXFORD COLLECTIONS 1.



1



2



3



4



5



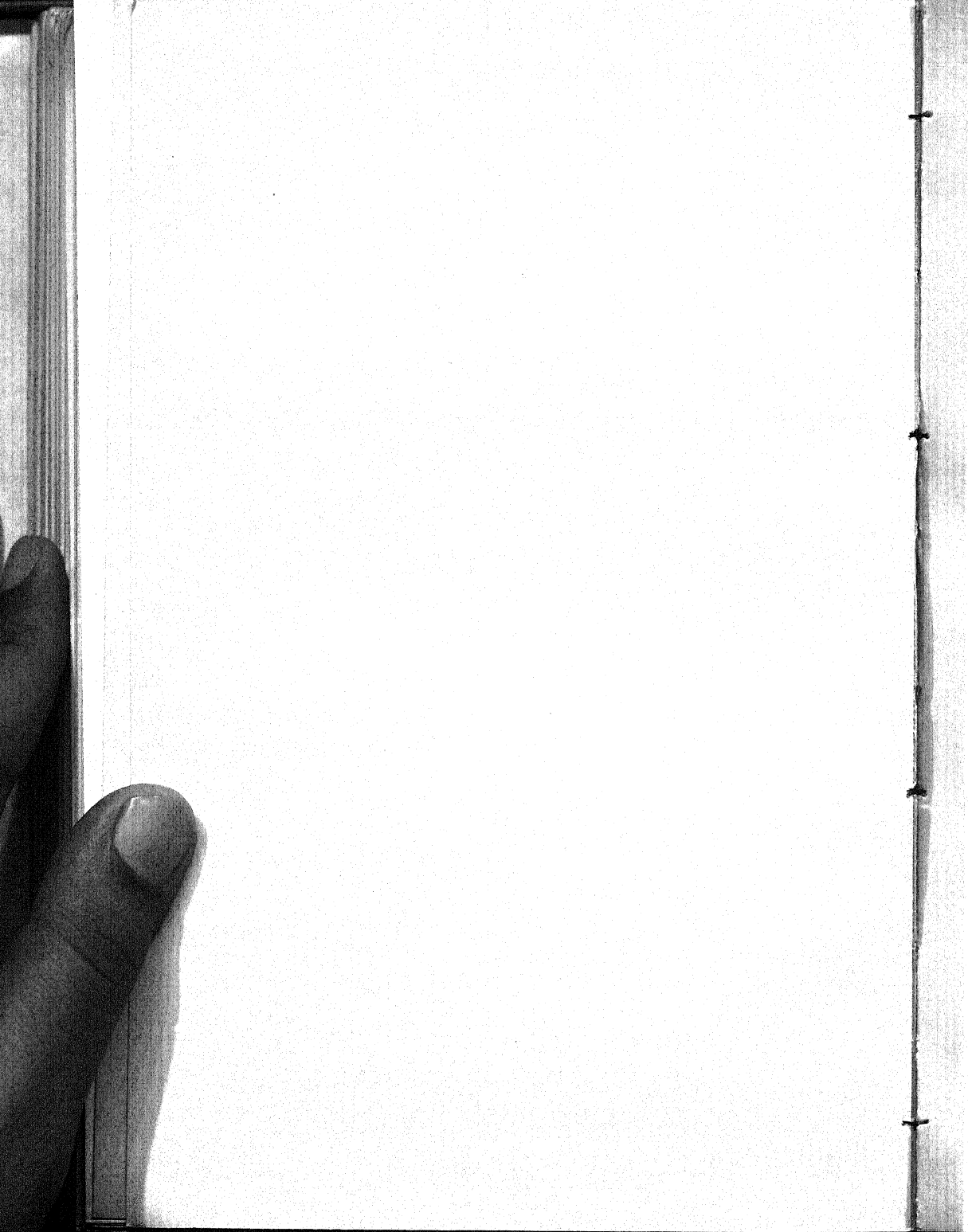
6



7



6





1



2



3



4



5



6



7



8



9



10



11



12



13



14



1



2



3



4



5



6



7



8



9



10



11



12



13



14





1



2



3



4



5



6



7



8



9



10



11



12

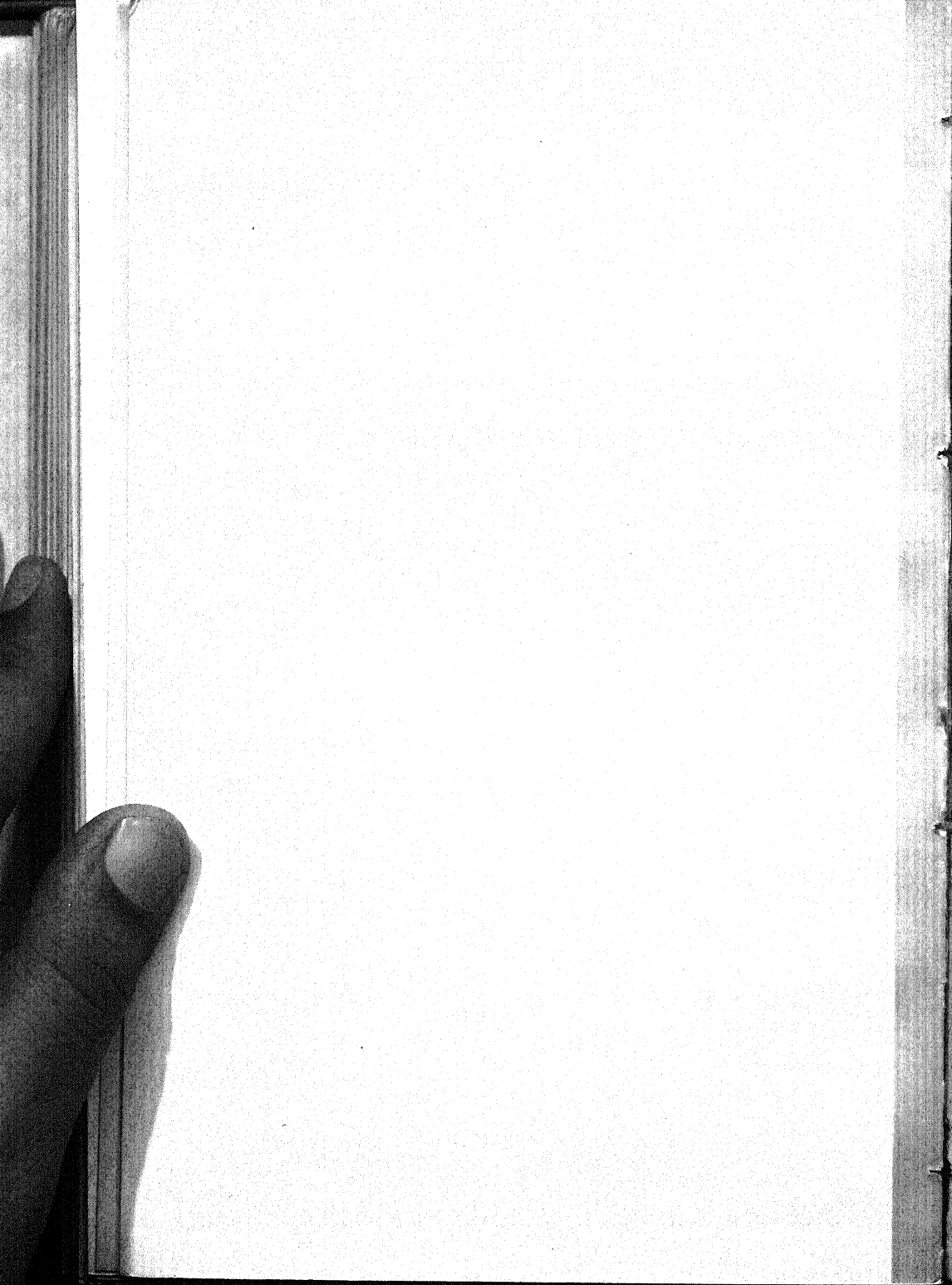


13



14







ROMAN IMPERIAL COINS IN THE
OXFORD COLLECTION (I)



1



7



13



27



28



29



30



31



35



36



39



40



42



43



44



46



47



49



50



1



2



3



4



5



6



7



8



9



10



11



12



13



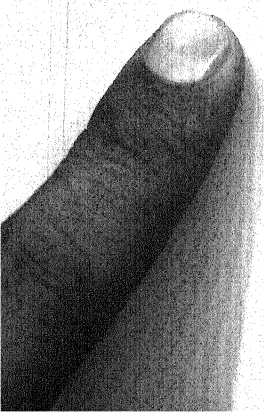
14



15



16



LIST OF FELLOWS
OF THE
ROYAL
NUMISMATIC SOCIETY
1939



PATRON

HIS MAJESTY THE KING

LIST OF FELLOWS

OF THE

ROYAL

NUMISMATIC SOCIETY

1939

*The sign * indicates that the Fellow has compounded for his annual contribution : † that the Fellow has died during the year.*

ELECTED

- 1931 ADCOCK, PROFESSOR F. E., O.B.E., M.A., D.LITT., King's College, Cambridge.
- 1907 ALLAN, JOHN, Esq., M.A., F.S.A., *Keeper of Coins and Medals*, British Museum, W.C. 1, *Hon. Secretary*.
- 1935 ALLEN, DEREK F., Esq., B.A., British Museum., W.C. 1.
- 1933 ARMITAGE, T. W., Esq., Trent Lock, Long Eaton, Nottingham.
- 1938 ASKEW, GILBERT, Esq., F.S.A. (Scot.), 48 Brackendale, Potters Bar.
- 1938 BALDWIN, ALBERT HENRY, Esq., 3 Robert Street, W.C. 2.
- 1923 BALDWIN, A. H. F., Esq., 3 Robert Street, W.C. 2.
- 1933 BALDWIN, W. V. ROYLE, Esq., Mont Dore, West Hill, High Salvington, Worthing.
- 1909 BALDWIN BRETT, MRS. A., 136-36 Maple Avenue, Flushing, New York, U.S.A.
- 1919 BEAZLEY, PROFESSOR J. D., M.A., Ashmolean Museum, Oxford.
- 1934 BECKLAKE, J. T., Esq., The Royal Mint, Pretoria.
- 1939 BENAVIDES, HIS EXCELLENCY SENOR DON ALFREDO, Peruvian Legation, 65 Cadogan Square, S.W. 1.

ELECTED

- 1920 BERNAYS, M. L'ÉCUYER ÉDOUARD, 204 Avenue Karel de Preter, Borgerhout, Antwerp, Belgium.
- 1933 *BIDDELL, W. H., Esq., Dorrington, Circular Road, Anuradhapura, Ceylon.
- 1923 BLUNT, C. E., Esq., F.S.A., 15 Gerald Road, S.W. 1.
- 1917 BORDONARO, BARON G. CHIARAMONTE, Palazzo Bordonaro, Piazza Municipio, Palermo, Sicily.
- 1937 BRIDGE, J. W., Esq., M.R.S., F.R.M.S., The Nook, Lucerne Street, Maidstone.
- 1932 *BRIGGS, LLOYD C., Esq., 64 Beacon Street, Boston, Mass., U.S.A.
- 1895 BRIGHTON PUBLIC LIBRARY, The Curator, Town Hall, Brighton.
- 1906 BRISTOL CENTRAL LIBRARY, The Librarian, Bristol.
- 1930 BROOKE, W. A., Esq., Spring House, Thetford.
- 1924 BUNN, C. J., Esq., 125 Grove Lane, S.E. 5.
- 1897 BURN, SIR RICHARD, C.S.I., I.C.S. (retd.), M.R.A.S., 9 Staver-ton Road, Oxford.
- 1911 BURTON, FRANK E., Esq., J.P., F.S.A., Orston Hall, Notts.
- 1935 CAHN, M. HERBERT A., Freiestrasse 74, Basle, Switzerland.
- 1886 CALDECOTT, J. B., Esq., F.S.A., Amberley, Arundel, Sussex.
- 1914 CAMERON, LT.-COL. J. S., D.S.O., Low Wood, Bethersden, Ashford, Kent.
- 1923 CARLYON-BRITTON, RAYMOND, Esq., 38 Westgate, Chichester.
- 1923 CARTWRIGHT, RICHARD, Esq., Aynho Park, Banbury.
- 1939 CHAKRABORTTY, PROFESSOR S. K., Ananda Mohan College, Mymensingh, Bengal, India.
- 1925 CHAMBERLAIN, JOHN A., Esq., 27 Gilkes Crescent, S.E. 21.
- 1936 COMTE CHANDON DE BRIAILLES, La Cordelière, Chaource (Aube), France.
- 1929 CHAPMAN, G. E., Esq., 5 Christchurch Avenue, Tunbridge Wells.
- 1936 *CHARLESWORTH, MARTIN P., Esq., M.A., President of St. John's College, Cambridge.
- 1922 CHARLIER, M. PIERRE, 213 Grand Rue, Montignie-sur-Sambre, Belgium.
- 1929 CHECKLEY, JAMES F. H., Esq., L.R.I.B.A., 26 Maple Avenue, Maidstone.
- 1914 CICCIO, MONSIGNORE COMM. UFF. GIUSEPPE DE, 14 Parco Margherita, Naples, Italy.

ELECTED

- 1891 *CLAUSON, THE HON. SIR CHARLES, C.B.E., Hawkshead House, Hatfield, Herts.
- 1911 *COATES, R. ASSHETON, Esq.
- 1913 *CODRINGTON, HUMPHREY W., Esq., B.A., M.R.A.S., 142 Oakwood Court, W. 14.
- 1937 COMENCINI, M., Esq., 100 Riverside Road, Romford, Essex.
- 1932 COPENHAGEN, Nationalmuseet, Møntsamling.
- 1926 CÔTE, M. CLAUDIUS, 33 Rue du Plat, Lyons, France.
- 1902 COVERNTON, J. G., Esq., M.A., C.I.E., Parsonage House, Finchinglefield, Braintree, Essex.
- 1939 CRAIG, J. H. M'C., Esq., C.B., Deputy Master of the Royal Mint, E.C. 3.
- 1919 *CRASTER, H. H. E., Esq., M.A., D.LITT., Litt.D., F.S.A., *Bodley's Librarian*, Oxford.
- 1920 CROSS, A. PEARL, Esq., F.R.G.S., 35 St. Martin's Court, W.C. 2.
- 1914 CROWTHER-BEYNON, V. B., Esq., M.B.E., M.A., F.S.A., Beckington, near Bath.
- 1934 DAKERS, H. J., Esq., M.A., 3 Belmont Hill, St. Albans.
- 1930 DAVIS, A. W., Esq., British Embassy, Baghdad.
- 1933 DENTON, ARTHUR RIDGWAY, Esq., The Myrtles, Haygate Road, Wellington, Shropshire.
- 1922 DICKSON, REV. W. H. FANE, Gorsley Vicarage, Gloucester.
- 1920 EMPEDOCLES, G., Esq., 34 Academy Street, Athens, Greece.
- 1938 EPHRAIM, DR. FRITZ, 48 Avenue Kleber, Paris XVII.
- 1872 *EVANS, SIR ARTHUR J., M.A., D.Litt., LL.D., Ph.D., F.R.S., Hon. V.-P.S.A., F.B.A., Corr. de l'Inst., Youlbury, near Oxford.
- 1892 *EVANS, LADY, M.A. (Oxon.), 9 Kensington Park Gardens, W. 11, and Thousand Acres, Wotton-under-Edge, Gloucestershire.
- 1905 FAIRBAIRN, SIDNEY H., Esq., M.A., M.D., 11 Bolton Gardens, S.W. 5.
- 1904 *FARQUHAR, MISS HELEN, 6 Lowndes Street, S.W. 1.
- 1921 FAULKNER, W. J., Esq., Sutton House, Endon, Stoke-on-Trent.
- 1910 FISHER LIBRARY, THE, University, Sydney, N.S.W.
- 1908 FITZWILLIAM MUSEUM, The Director, Cambridge.

ELECTED

- 1928 FORKER, LEONARD STEYNING, Esq., 20 Lancaster Park, Richmond, Surrey.
- 1896 *FRY, CLAUDE BASIL, Esq., F.S.A., Hannington Hall, Highworth, Wilts.
- 1897 *GANS, LEOPOLD, Esq., 207 Maddison Street, Chicago, U.S.A.
- 1912 GANTZ, REV. W. L., M.A., C.F., St. Michael's Cottage, The Avenue, Camberley, Surrey.
- 1907 GARDNER, WILLOUGHBY, Esq., D.Sc., F.S.A., F.L.S., F.R.G.S., Y Berlfa, Deganwy, North Wales.
- 1928 GAVIN, THE VEN. ARCHDEACON GORDON HAY, St. Mary's Vicarage, New Plymouth, Taranaki, New Zealand.
- 1913 GILBERT, WILLIAM, Esq., F.R.S.A., L.R.I.B.A., 74 Broad Street Avenue, E.C. 2.
- 1920 GINORI, MARCHESE ROBERTO VENTURI, 75 Via della Scala, Florence, Italy.
- 1894 GOODACRE, HUGH, Esq., J.P., Ullesthorpe Court, Lutterworth, Rugby.
- 1936 GRANT, MICHAEL, Esq., B.A., 18 Victoria Grove, W. 8.
- 1891 *GRANTLEY, LORD, D.L., J.P., F.S.A., Weeke Manor, Winchester, Hants.
- 1914 GROSE, S. W., Esq., M.A., *Honorary Curator of Coins in the Fitzwilliam Museum*, 18 Hobson Street, Cambridge.
- 1916 HAINES, GEOFFREY COLTON, Esq., F.S.A., 31 Larpent Avenue, Putney, London, S.W. 15, *Hon. Treasurer*.
- 1899 HALL, HENRY PLATT, Esq., Pentreheylin Hall, Llanymynech, Montgomeryshire.
- 1933 HANSEN, FRANTS JOHAN, Esq., Woodstock, Hurst Road, Bexley, Kent.
- 1904 HARRISON, FREDERICK A., Esq., F.Z.S., 40 Wembley Park Drive, Wembley, Middlesex.
- 1916 *HART, R. EDWARD, Esq., M.A., Brooklands, Blackburn.
- 1939 HAUSER, ALEXANDER, Esq., 8 Launceston Place, W. 8.
- 1934 HAYDN-MORRIS, HAROLD, Esq., Pokes, Hellingly, Sussex
- 1931 HEDLEY, W. PERCY, Esq., F.S.A., F.G.S., Gresham House, Corbridge, Northumberland.
- 1934 HEITHAUS, REV. CLAUDE H., Ph.D., Università Gregoriana, Piazza della Pilotta, Rome.
- 1939 HEMMY, ARTHUR STANLEY, Esq., B.A., M.Sc., 45 Elgin Road, Bournemouth.

ELECTED

- 1930 HERZFELDER, HUBERT, Esq., 77, Rue des Saints Pères, Paris VI.
- 1900 HEWLETT, LIONEL M., Esq., Greenbank, Byron Hill, Harrow-on-the-Hill, Middlesex.
- 1932 HILDYARD, E. J. W., Esq., B.A., F.S.A., Horsley Hall, Eastgate, Co. Durham.
- 1893 HILL, SIR GEORGE, K.C.B., M.A., D.C.L., LL.D., Litt.D., F.S.A., F.B.A., 12 Sussex Place, N.W. 1, *Honorary Vice-President.*
- 1895 †HODGE, THOMAS, Esq., Fyning House, Rogate, Petersfield, Hants.
- 1937 HOHENKUBIN, MARQUIS ALBRECHT DE, 32 Weihburggasse, Vienna I.
- 1920 *HOLROYD, MICHAEL, Esq., M.A., F.S.A., Brasenose College, Oxford.
- 1908 *HUNTINGTON, ARCHER M., Esq., Honorary President of the American Numismatic Society, Audubon Park, 156th Street, West of Broadway, New York, U.S.A.
- 1922 JAMESON, Monsieur R., 8 Avenue Velasquez, Paris VIII^e.
- 1914 *KERR, ROBERT, Esq., M.A., F.S.A. (Scot.), Royal Scottish Museum, Edinburgh.
- 1939 KING, CUTHBERT, Esq., I.C.S., Sialkot, Panjab, India.
- 1920 KING, COLONEL E. J., C.B., C.M.G., A.D.C., D.L., J.P., M.A., F.S.A., F.R.Hist.Soc., The Old House, East End Road, N.2.
- 1938 KIRKMAN, JAMES S., Esq., M.A., 5 Park Road, N.W. 1.
- 1917 LAMB, MISS WINIFRED, Holly Lodge, Campden Hill, W. 8.
- 1920 LAST, PROFESSOR H. M., M.A., LL.D., Brasenose College, Oxford.
- 1939 LATHAM, L. J., Esq., 36B Longridge Road, S.W. 5.
- 1885 *LAWRENCE, L. A., Esq., F.R.C.S., F.S.A., 44 Belsize Square, N.W. 3.
- 1939 LEDERER, DR. PHILIP, Villa S. Salvatore 6, Lugano, Switzerland.
- 1939 LEE, CAPTAIN REGINALD, 82 Oxhey Avenue, Oxhey, Herts.
- 1920 LEWIS, JOHN CAMPBELL, Esq., Bridge House, Troedyrhiw, Merthyr Tydfil, Wales.
- 1922 †*LLOYD, MISS MURIEL ELEANOR HAYDON, 7 Manor Court, Pinehurst, Cambridge.
- 1907 LOCKETT, R. CYRIL, Esq., J.P., F.S.A., 58 Cadogan Place, S.W. 1.
- 1921 LUCKNOW MUSEUM, The Curator of the, Lucknow, India.

ELECTED

- 1934 *MABBOTT, PROF. T. O., 56 East 87th Street, New York City, U.S.A.
- 1895 MACDONALD, SIR GEORGE, K.C.B., P.S.A. (Scot.), M.A., LL.D., D.Litt., Litt.D., F.B.A., 17 Learmonth Gardens, Edinburgh.
- 1938 MACINTOSH, H. E., Esq., Tatham Stamp and Coins Co., Springfield, Mass., U.S.A.
- 1923 MALLINSON, REV. ARNOLD, c/o St. Frideswide's Vicarage, Oxford.
- 1932 MARTIN, CAPTAIN M. F. C., R.E., Ardlonghor, Killylea, Co. Armagh.
- 1912 MATTINGLY, HAROLD, Esq., M.A., British Museum, W.C. 1, *Vice-President*.
- 1905 MAYROGORDATO, J., Esq., Gilridge, Cowden Pound, Edenbridge, Kent.
- 1937 DE MAYO, M. MARCEL, Strada Luterana 21, Bucharest.
- 1929 McNICKLE, A. J. S., Esq., c/o Royal Mail Steam Packet Co., Royal Mail House, E.C. 2.
- 1916 MEIGH, ALFRED, Esq., Dole Spring House, Forsbrook, Stoke-on-Trent.
- 1905 MESSENGER, LEOPOLD G. P., Esq., 151 Brecknock Road, Tufnell Park, N. 19, *Librarian*.
- 1929 MILBANK, S. R., Esq., Panfield, Huntingdon, New York, U.S.A.
- 1924 MILLER, HOYT, Esq., East Shore Road, Great Neck, Long Island, New York, U.S.A.
- 1897 MILNE, J. GRAFTON, Esq., M.A., D.Litt., 23 Belsyre Court, Woodstock Road, Oxford.
- 1921 MILNE, MRS. J. GRAFTON, 23 Belsyre Court, Woodstock Road, Oxford.
- 1932 MITCHELL, D. D., Esq., 18 Craneford Way, Twickenham.
- 1910 MITCHELL LIBRARY, THE, Glasgow, The Librarian.
- 1888 MONTAGUE, LIEUT.-COL. L. A. D., Penton, near Crediton, Devon.
- 1938 MOORE, SIDNEY, Esq., 8 Woburn Court, Russell Square, W.C. 1.
- 1916 *MYLNE, EVERARD, Esq., B.A., St. Andrew's College, Grahamstown, South Africa.
- 1928 *NAVILLE, MONSIEUR LUCIEN, 5-7 Rue Lévrier, Geneva.
- 1906 NEWBERRY LIBRARY, The Librarian, Chicago, U.S.A.
- 1905 *NEWELL, E. T., Esq., President of the American Numismatic Society, 156th Street, West of Broadway, New York, U.S.A.

ELECTED

- 1904 NEWINGTON PUBLIC LIBRARY, The Librarian, Walworth Road, S.E. 17.
- 1931 NIETER, HANS M., Esq., 41 A Golders Green Road, N.W. 11.
- 1930 NORTHUMBERLAND, THE DUKE OF, 17 Princes Gate, S.W. 7.
- 1936 NOTMAN, JOHN W., Esq., 156 Earls Court Road, S.W. 5.
- 1882 OMAN, PROFESSOR SIR CHARLES, K.B.E., M.A., D.C.L., LL.D., F.S.A., F.B.A., Frewin Hall, Oxford, *Vice-President*.
- 1925 OMAN, CHARLES CHICHELE, Esq., M.A., 13 Woodborough Road, S.W. 15.
- 1931 O'NEIL, B. H. St. J., Esq., M.A., F.S.A., *Inspector of Ancient Monuments for Wales*, 14 Crescent Road, Beckenham, Kent.
- 1932 OSLO, Universitetets Myntkabinet, Norway.
- 1903 PARSONS, H. ALEXANDER, Esq., Charmandean, Town Court Crescent, Petts Wood, Kent.
- 1937 PASLEY-WILLIAMSON, CAPTAIN W. H., 85 Warwick Road, S.W. 5.
- 1936 *PEARCE, BERTRAM W., Esq., M.A., F.S.A., Sunnymead, Ash Road, Sandwich.
- 1926 PEARCE, J. W. E., Esq., M.A., F.S.A., 10 Cromwell Place, S.W. 7.
- 1936 PHILIP-PHILLIPS, GODFREY S., Esq., 118 Queen's Gate, S.W. 7.
- 1927 PINCHES, JOHN ROBERT, Esq., 21 Albert Embankment, S.E. 11.
- 1928 PIRIE GORDON, H., Esq., D.S.C., M.A., F.S.A., 46 Addison Avenue, W. 11.
- 1927 POND, SHEPARD, Esq., 141 Longwood Avenue, Brookline, Mass., U.S.A.
- 1936 POOLE, WILLIAM E., Esq., 31 Canberra Road, Charlton Park, S.E. 7.
- 1923 PRAGUE, Bibliothèque de l'Université, Czecho-Slovakia.
- 1935 RASHLEIGH, J. C. S., Esq., M.A., M.D., Throwleigh, Okehampton, Devon.
- 1937 RATCLIFFE, H. H., Esq., Holly Mount, Rawtenstall, Rossendale, Lancs.
- 1923 RAVEL, MONSIEUR O., 7 Bd. de Lorraine, Pointe Rouge, Marseilles.
- 1937 RAVEN, E. J. P., Esq., B.A., The University, Aberdeen.
- 1930 RAWSON, L. H., Esq., Atholl Bank, Lovelace Gardens, Surbiton.

ELECTED

- 1909 RAYMOND, WAYTE, Esq., 630 Fifth Avenue, New York City, U.S.A.
- 1933 ROBERTS, KENNETH L., Esq., Aberdale, 2 South Road, Newton Abbot.
- 1937 ROBERTSON, MISS ANNE S., M.A., Hunterian Museum, The University, Glasgow.
- 1939 ROBINSON, PROFESSOR DAVID M., John Hopkins University, Baltimore, Md., U.S.A.
- 1911 *ROBINSON, E. STANLEY G., Esq., M.A., F.S.A., *Deputy Keeper of Coins and Medals*, British Museum, W.C. 1, and 23 Upper Phillimore Gardens, W. 8, *Hon. Secretary*.
- 1910 ROGERS, THE VERY REV. EDGAR, O.B.E., M.A., F.S.A., The Deanery, Bocking, Essex.
- 1924 ROWE, CAPTAIN FRANCIS G. C., 65 Finborough Road, S.W. 10.
- 1919 RYAN, V. J. E., Esq., Les Silleries, Grouville, Jersey, C.I.
- 1916 SAINT LOUIS NUMISMATIC SOCIETY, Washington University, St. Louis, Mo., U.S.A.
- 1916 *SALISBURY, F. S., Esq., M.A., Dorset House, Parkland Grove, Ashford, Middlesex.
- 1935 SASSOON, DAVID C., Esq., 12 A Wildcroft Manor, S.W. 15.
- 1939 SCHWARBACHER, DR. WILLY, c/o Royal Coin Cabinet, Copenhagen.
- 1917 SEABY, B. A., Esq., 65 Great Portland Street, W. 1 and 46 Baker Street, Potters Bar.
- 1907 *SELTMAN, CHARLES T., Esq., M.A., Queens' College, Cambridge.
- 1890 SELTMAN, E. J., Esq., Villa Maria, S. Giorgio a Cremano, Naples.
- 1936 SHEAR, MRS. T. LESLIE, 12 Battle Road, Princeton, N.J., U.S.A.
- 1893 *SIMS, BRIG.-GENERAL R. F. MANLEY, C.M.G., D.S.O., 163 Strand, W.C. 2.
- 1934 SMITH, WELBORN OWSTON, Esq., M.A., 41 Molyneux Park, Tunbridge Wells.
- 1939 SMYTHE, V. DU BÉDAT, Esq., Sherwood, Irving Road, Bournemouth.
- 1930 SNIJDER, PROFESSOR G. A. S., Allard Pierson Stichting, Weesperzijde 33, Amsterdam (O.).
- 1937 SOHONI, S. V., Esq., St. Catherine's College, Cambridge.
- 1922 SPENCER-CHURCHILL, CAPT. E. G., M.C., F.S.A., Northwick Park, Blockley, Worcestershire.

ELECTED

- 1936 SPINK, DAVID F., Esq., 5-7 King Street, S.W. 1.
 1894 SPINK, SAMUEL M., Esq., 5-7 King Street, S.W. 1.
 1928 STEBBING, W. P. D., Esq., F.S.A., Five Ways, Upper Deal, Kent.
 1932 STEWART, JAMES R., Esq., Park Cottage, Kingsdown, Taunton.
 1931 STRAUSS, M. LOUIS, 180 Bd. Berthier, Paris XVII^e.
 1933 SUTHERLAND, ALLAN, Esq., c/o Hansard, Parliament House, Wellington, New Zealand.
 1936 SUTHERLAND, C. H. V., Esq., M.A., Westfield Farm House, Cumnor, Oxford.
 1914 SYDENHAM, REV. EDWARD A., M.A., The Vicarage, West Molesey, Surrey, *President*.
 1896 *TAFES, H. W., Esq., M.B.E., 27 Elderslie Road, Eltham, S.E. 9.
 1919 TARAPOREVALA, VICAJI D. B., Esq., Tarapore Villa, 79 Koregaon Park, Poona, C. P., India.
 1936 THOMPSON, JAMES DAVID ANTHONY, Esq., 5 Chadlington Road, Oxford.
 1918 THORBURN, PHILIP, Esq., B.A., 86 Rochester Row, S.W. 1.
 1935 TINCHANT, M. PAUL, 19 Avenue des Arts, Brussels.
 1929 TORONTO, University of, The Librarian, Canada.
 1939 TOYNBEE, MISS J. M. C., Newnham College, Cambridge.
 1934 ULRICH-BANSA, COLONELE OSCAR, 9 Riviera S. Nicolò, Venice (Lido), Italy.
 1912 VAN BUREN, DR. A. W., American Academy, Porta San Pancrazio, Rome (29).
 1923 WALES, THE NATIONAL MUSEUM OF, Cardiff.
 1932 WALKER, JOHN, Esq., M.A., M.R.A.S., British Museum, W.C. 1, *Foreign Secretary*.
 1924 WALLWORTH, J. N. G., Esq., Fairbanks, Stanley Park Road, Carshalton.
 1911 WARRE, FELIX W., Esq., O.B.E., M.C., 128 Church Street, W. 8.
 1920 *WATSON, COMMANDER HAROLD NEWALL, R.N.
 1885 *WEBER, F. PARKES, Esq., M.D., F.S.A., 13 Harley Street, W. 1.

ELECTED

- 1932 WERNSTROM, ERNEST, Esq., P.O. Box 384, San Francisco, U.S.A.
- 1915 WHITEHEAD, R. B., Esq., M.A., F.A.S.B., M.R.A.S., I.C.S. (retd.), 30 Millington Road, Cambridge.
- 1937 WHITTON, C. A., Esq., B.A., The High School, Newcastle, Staffs.
- 1934 WILTSHIRE, R. G., Esq., Longhouse Lodge, Ermyn Way, Leatherhead.
- 1933 WOOD, MISS MARGARET ENVYS, 14 Bentinck Close, North Gate, Regent's Park, N.W. 8.
- 1920 WOODWARD, W. H., Esq., 48 Campden Hill Gate, W. 8.
- 1903 WRIGHT, H. NELSON, Esq., I.C.S. (retd.), The Larches, West Hall Road, Upper Warlingham, Surrey.
- 1936 WRIGHTSON, ANTHONY G., Esq., 20 Brunswick Gardens, W. 8.
- 1933 WÜTHRICH, G., Esq., M.I.E.E., 81 Pursers Cross Road, S.W. 6.
- 1922 YOANNA, A. DE, Esq., B.A., M.D., 111 Pierrepont Street, Brooklyn, New York, U.S.A.
- 1932 YORKSHIRE ARCHAEOLOGICAL SOCIETY, 10 Park Place, Leeds.
- 1919 ZIEGLER, PHILIP, Esq., Lilly Villa, Victoria Park, Manchester.

HONORARY FELLOWS

ELECTED

- 1898 HIS MAJESTY VICTOR EMMANUEL III, KING OF ITALY,
Palazzo Quirinale, Rome.
- 1930 ALFÖLDI, PROFESSOR ANDREAS, Ferencz Jozef Rakpart 25,
Budapest.
- 1898 BLANCHET, Monsieur ADRIEN, Membre de l'Institut, 10 Bd.
Émile Augier, Paris XVI.
- 1935 CESANO, SIGNORINA L., Museo Nazionale, Rome.
- 1926 DIEUDONNÉ, MONSIEUR ADOLPHE, 14 Rue Worth, Suresnes,
Seine, France.
- 1939 FORRER, LEONARD, Esq., Helvetia, 24 Homefield Road,
Bromley, Kent.
- 1899 GABRICI, PROFESSOR DR. ETTORE, Piazza Bologni 20,
Palermo, Sicily.
- 1937 GALSTER, M. GEORG, Royal Coin Cabinet, Copenhagen.
- 1932 LAFFRANCHI, SIGNOR L., via Carlo Ravizza 19, Milan.
- 1937 LOEHR, DR. A. v., Würthgasse 14, Vienna XIX.
- 1904 MAURICE, M. JULES, 15 Rue Vaneau, Paris VII.
- 1899 PICK, DR. BEHRENDT, Schwäbische Strasse 9, Berlin, W. 30.
- 1926 TOURNEUR, PROFESSOR VICTOR, Conservateur en chef de la
Bibliothèque Royale, Brussels.

MEDALLISTS

OF THE ROYAL NUMISMATIC SOCIETY

ELECTED

- 1883 CHARLES ROACH SMITH, F.S.A.
- 1884 AQUILLA SMITH, M.D., M.R.I.A.
- 1885 EDWARD THOMAS, F.R.S.
- 1886 MAJOR-GENERAL ALEXANDER CUNNINGHAM, C.S.I., C.I.E.
- 1887 JOHN EVANS, D.C.L., LL.D., F.R.S., P.S.A.
- 1888 DR. F. IMHOOF-BLUMER, Winterthur.
- 1889 PROFESSOR PERCY GARDNER, Litt.D., F.S.A.
- 1890 MONSIEUR J. P. SIX, Amsterdam.
- 1891 DR. C. LUDWIG MÜLLER, Copenhagen.
- 1892 PROFESSOR R. STUART POOLE, LL.D.
- 1893 M. W. H. WADDINGTON, Sénateur, Membre de l'Institut, Paris.
- 1894 CHARLES FRANCIS KEARY, M.A., F.S.A.
- 1895 PROFESSOR DR. THEODOR MOMMSEN, Berlin.
- 1896 FREDERIC W. MADDEN, M.R.A.S.
- 1897 DR. ALFRED VON SALLET, Berlin.
- 1898 THE REV. CANON W. GREENWELL, M.A., F.R.S., F.S.A.
- 1899 M. ERNEST BABELON, Membre de l'Institut, Paris.
- 1900 PROFESSOR STANLEY LANE-POOLE, M.A., Litt.D.
- 1901 S. E. BARON WLADIMIR VON TIESENHAUSEN, St. Petersburg.
- 1902 ARTHUR J. EVANS, Esq., M.A., F.R.S., F.S.A.
- 1903 M. GUSTAVE SCHLUMBERGER, Membre de l'Institut, Paris.
- 1904 HIS MAJESTY VICTOR EMMANUEL III, KING OF ITALY.
- 1905 SIR HERMANN WEBER, M.D.
- 1906 COMM. FRANCESCO GNECCHI, Milan.
- 1907 BARCLAY V. HEAD, D.Litt., D.C.L., Ph.D., Corr. de l'Inst.
- 1908 PROFESSOR DR. HEINRICH DRESSSEL, Berlin.
- 1909 HERBERT A. GRUEBER, F.S.A.
- 1910 DR. FRIEDRICH EDLER VON KENNER, Vienna.
- 1911 OLIVER CODRINGTON, M.D., M.R.A.S., F.S.A.
- 1912 GENERAL-LEUTNANT MAX VON BAHRFELDT, Hildesheim.
- 1913 GEORGE MACDONALD, Esq., M.A., LL.D.
- 1914 JEAN N. SVORONOS, Athens.
- 1915 GEORGE FRANCIS HILL, Esq., M.A.
- 1916 M. THÉODORE REINACH, Membre de l'Institut, Paris.
- 1917 L. A. LAWRENCE, Esq., F.S.A.
- 1918 Not awarded.
- 1919 M. ADRIEN BLANCHET, Membre de l'Institut, Paris.
- 1920 H. B. EARLE-FOX and J. S. SHIRLEY-FOX.
- 1921 PERCY H. WEBB.
- 1922 FREDERICK A. WALTERS, F.S.A.
- 1923 PROFESSOR J. W. KUBITSCHKE, Vienna.
- 1924 HENRY SYMONDS, F.S.A.
- 1925 EDWARD T. NEWELL, Esq., New York.

ELECTED

- 1926 R. W. MACLACHLAN, Montreal.
1927 MONSIEUR ADOLPHE DIEUDONNÉ, Paris.
1928 SIR CHARLES OMAN, K.B.E., M.P., D.C.L., F.B.A.
1929 MONSIEUR JULES MAURICE, Paris.
1930 REV. EDWARD A. SYDENHAM, M.A.
1931 MISS HELEN FARQUHAR.
1932 H. NELSON WRIGHT, Esq., I.C.S. (retd.).
1933 DIREKTOR PROFESSOR KURT REGLING, Berlin.
1934 GEORGE CYRIL BROOKE (posthumously).
1935 PROFESSOR DR. BEHRENDT PICK, Gotha.
1936 JOHN ALLAN, Esq., M.A., F.S.A.
1937 PROFESSOR VICTOR TOURNEUR, Brussels.
1938 J. GRAFTON MILNE, Esq., M.A., D.Litt.
1939 J. W. E. PEARCE, Esq., M.A., F.S.A.



PROCEEDINGS OF THE
ROYAL NUMISMATIC SOCIETY.

PROCEEDINGS OF THE ROYAL NUMISMATIC SOCIETY.

SESSION 1938—1939.

OCTOBER 20, 1938.

ORDINARY MEETING.

REV. EDWARD A. SYDENHAM, President, in the Chair.

The Minutes of the Ordinary Meeting of May 19 were read and approved.

Messrs. A. H. Baldwin, James S. Kirkman, and Sidney Moore were proposed for election.

The President exhibited a series of Roman coins of the fourth century to illustrate the paper.

Mr. Bertram W. Pearce, F.S.A., showed a number of new "radiates" from Richborough.

Mr. Derek Allen showed a new variety of the penny of Ecgberht, King of Wessex, moneyer Cobba, a seventeenth-century token of George Ford of Pevensy 1658, and two barbarous Roman coins; all found at Pevensy.

Mr. William Gilbert exhibited the following coins of Pope Innocent XII (1691–1700), all in very fine condition:

Gold: Scudo d'oro, 1697 (Sheaf).

Silver: Scudo 1696 (Consistory Court).

Half-scudo 1693 (Pelican).

„ 1697 (Noah's ark).

Testones of 1691, 1693, 1696, 1698.

Giulios of 1692, 1693, 1696, 1700.

Grossi of 1691, 1699.

Half-grossi of 1693, 1698.

Mr. Mattingly read a paper, illustrated by slides, on "The Christian Revolution as seen through the Roman Coinage". To understand that revolution it was necessary to know something of the later paganism, which, bitterly hostile to Christianity as it might be, yet shared with it some of its habits of thought. The gods were more often thought of as "comrades" and "preservers" of men than as remote other-worldly powers. For the pagan, the person of the Emperor was sacred, divine, or very near it; the utmost the Christian could allow was "Empire by the Grace of God", and over this point the fiercest battle was waged. The "Genio Populi Romani" piece of Diocletian and his colleagues is the typical coin of the great persecution. The subsequent triumph of Christianity is at first reflected not in definitely Christian types but in a subtle change in the quality of the paganism and in neutral, vaguely philosophical types. Only from about A.D. 350 does the new religion emerge into the full light of day.

NOVEMBER 17, 1938.

ORDINARY MEETING.

Rev. EDWARD A. SYDENHAM, President, in the Chair.

The Minutes of the last Meeting were read and approved.

Messrs. A. H. Baldwin, Sidney Moore, and J. S. Kirkman were elected Fellows of the Society, and Messrs. Cuthbert King and H. E. MacIntosh were proposed for election.

The evening was devoted to exhibitions.

Mr. W. Owston Smith showed siege pieces of Leiden, Haarlem, Middleburg, and Frankental, and a medal of the siege of Geertruidenberg (1593) with view of the camp. He also showed talers of Philip II of Grubenhagen 1595 and of Joachim Frederick Archbishop of Magdeburg to show armour, and a gulden taler of Colmar 1571 to show a wheel-mace.

Mr. A. H. F. Baldwin showed the following gold medals : (1) Battle of Dunbar, 1650, by Thomàs Simon. (2) Battle of Culloden, 1746, by Richard Yeo. (3) Battle of Ramillies, 1706, by Croker. (4) Engraved Medal of Bank of England Volunteers, 1805. (5) Sultan's Medal for Egypt, 1801 (General's size). (6) Medal for Bagur and Palamos, 1810. (7) Spanish Medal for Catalonia, 1810.

Mr. B. A. Seaby showed a very fine medallion of Gordian III.

The President exhibited a series of Republican denarii of C. Valerius Flaccus and Cn. Nerius showing standards of hastati and principes. He also showed sestertii of Nero, types "Decursio" and "Adlocutio" and a series of legionary coins of Mark Antony.

Mr. W. Gilbert showed a rare satirical medal issued in France during the Boer War: *obv.* Badge of France surrounded by: Long Live the Transvaal. Welcome to President Kruger from France; *rev.* A lion striking birds with his paws—(above): The Boer War 1900 (below): The assassin says, "You are mine for I am big and you are small". *R.* 135 mm.

Mr. H. Nelson Wright showed the rupee struck by the mutineers at Bareilly in the name of Shah Alam, but dated 1274:73.

Mr. E. S. G. Robinson showed electrotypes of two Greek dies in the possession of Monsieur V. A. Adda of Alexandria—one for the obverse of an Athenian tetradrachm and the other for the reverse of a Philip II stater, the former with dies carved on three sides of it.

Mr. Messenger exhibited eleven different types of Ortokid coins.

Mr. L. A. Lawrence showed a proof set of the coins of 1930 in perfect condition. He also exhibited a series of Roman coins with types of military interest.

DECEMBER 15, 1938.

ORDINARY MEETING.

Rev. EDWARD A. SYDENHAM, President, in the Chair.

The Minutes of the last Meeting were read and approved.

Messrs. Cuthbert King, I.C.S., and H. E. MacIntosh were elected Fellows of the Society, and Mr. J. H. Craig, Mr. A. S. Hemmy, and Dr. W. Schwabacher were proposed for election.

Messrs. Gilbert Askew and William Gilbert were appointed Honorary Auditors.

Mr. E. S. G. Robinson exhibited twelve drachms of Elis from the finds mentioned in Dr. Schwabacher's paper.

Mr. Bertram W. Pearce, F.S.A., showed 40 minimi of the Lydney type from Richborough and a variety of the "Pax" type of Carausius with spear instead of sceptre, also from Richborough.

Dr. W. Schwabacher read a paper in which he described a number of new Greek coins he had seen in the course of a residence in Greece, most of them in the celebrated collection of Professor Petsalis. Among the more important pieces were the hitherto unknown didrachm of Macedon under the Romans of the first *meris*, of which the tetradrachm is so common, a new archaic piece with *obv.* gorgoneion which Dr. Schwabacher showed was to be attributed to Melos; a tetrobol of Scione of the early fifth century with head of Protesilaos, a stater, a new denomination, of Tegea in Arcadia of the middle of the fourth century, with types, head of Athena and owl, and an interesting series of drachms of Elis with types eagle and hare and thunderbolt showing a great variety, of considerable religious interest, in the ornamentation of the thunderbolt, from a find of several hundreds. (This paper is published in this volume of the *Numismatic Chronicle*, pp. 1-20.)

JANUARY 19, 1939.

ORDINARY MEETING.

Rev. EDWARD A. SYDENHAM, President, in the Chair.

The Minutes of the last Meeting were read and approved.

Mr. J. H. Craig, C.B., Deputy-Master of the Royal Mint, Mr. A. S. Hemmy, and Dr. Willy Schwabacher were elected Fellows of the Society, and His Excellency Señor Don Alfredo Benavides, the Peruvian Minister, and Mr. V. du Bedat Smythe were proposed for election.

Mr. W. Gilbert exhibited five extremely fine coins of Vitellius. (1) Aureus: Cohen 85, M. & S. 21, 112 gr., *rev.* **S.P.Q.R.** in wreath from the Weber and Sartiges cabinets. (2) Denarius: Cohen 111, M. & S. 24 (3), 51 gr., *rev.* Tripod (Glendinings Sale, June 1938, lot 21). (3) Sestertius: Cohen 67, M. & S. 8 (9), *rev.* **PAX** (H. G. C. Day Collection 1934). (4) Dupondius: Cohen 15, M. & S. 20, *rev.* Concord (Rome Sale, 1924, lot 162). (5) As: Cohen 74 var., M. & S. 24 var., *rev.* Altar (Rome Sale, 1924, lot 168). All extremely fine.

Mr. E. S. G. Robinson illustrated forgeries of coins of Tarentum and Leontini.

Mr. Derek Allen read a paper entitled "The Supposed Halfpence of King John", in which he discussed various attributions proposed for the rare coins bearing the name Johannes with a bust wearing a fillet and having a moneyer's name on the reverse, and showed that they could not be coins of King John, but that they must have been struck by John de Curci as Lord of Ulster. The prototype of these coins, found, so far as is known, only in Ireland, was the penny of William the Lion, which gave a clue to the date. The curious feature is that the reverse legend did not suggest any obvious mints, but John de Curci's farthings of Down and Carrickfergus are known, and it was probable the moneyers' names were those of his moneyers at these places.

(This paper is published in the *Numismatic Chronicle*, 1938, pp. 282-92.)

Mr. Parsons, Mr. Dakers, Mr. Owston Smith, and Mr. J. Allan took part in the discussion which followed.

FEBRUARY 16, 1939.

ORDINARY MEETING.

Rev. EDWARD A. SYDENHAM, President, in the Chair.

The Minutes of the last Meeting were read and approved.

Señor Don Alfredo Benavides, the Peruvian Minister, and Mr. V. du Bedat Smythe were elected Fellows of the Society. Messrs. Alexander Hauser, L. J. Latham, and S. K. Chakraborty were proposed for election.

Mr. William Gilbert exhibited the following five coins of Augustus: (1) Aureus: Cohen 136, weight 121.5 gr., *rev.* Bull (*ex* Banazzio Coll.). (2) Aureus: Cohen 143, wt. 119.5 gr., *rev.* Apollo standing to left. ACT in ex. (3) Cistophorus: C. 33, wt. 184.5 gr., *rev.* Altar of Diana. (4) Denarius: C. 265, wt. 57.5 gr., *rev.* Shield (*ex* Disinger Coll.) (5) As: C. 244, *rev.* Figure (probably Livia), struck in reign of Tiberius (*ex* Vierordt Coll.). All extremely rare.

Mr. J. S. Kirkman exhibited a series of late Roman bronze coins from Leicester, including a type of Carausius new in bronze.

Mr. C. E. Blunt exhibited two of the very rare heavy pennies of Edward IV of London mint.

Mr. B. W. Pearce showed a series of varieties of late Romano-British coins from Richborough.

Mr. P. Thorburn showed a bronze coin of the brief reign of the Mogul Murad Bakhsh of Surat mint year 1.

Mr. G. C. Haines read the first part of his paper on "The Decline and Fall of the Roman Monetary System", in which he surveyed the changes made in the coinage from Augustus

down to Severus Alexander, and related them to what was known of the economic history of the period and drew many interesting parallels from modern currency problems.

MARCH 16, 1939.

ORDINARY MEETING.

Rev. EDWARD A. SYDENHAM, President, in the Chair.

The Minutes of the last Meeting were read and approved.

Messrs. Alexander Hauser, L. J. Latham, and Professor S. K. Chakraborty were elected Fellows of the Society, and Dr. Philip Lederer was proposed for election.

Mr. William Gilbert exhibited a very fine aureus of Trajan Decius (A.D. 249-251) (Cohen 104), wt. 58.5 gr., *rev.* VBERITAS AVG, Fertility standing to left, holding in her left hand a cornucopie and in her right an object usually described as a purse.

Mr. L. A. Lawrence showed a series of Ancient British coins to illustrate the paper.

Mr. L. G. P. Messenger exhibited a double (?) sestertius (wt. 610 gr.) of Severus Alexander: *obv.* IMP • CAES • M • AVR • SER • ALEXANDER AVG, Bust, laur., dr., r.; *rev.* P • M • TR • P • V • COS II PP SC: Mars with trophy and spear marching r.

Mr. Derek F. Allen gave a lecture on "Ancient British Coins" illustrated by lantern slides, in which he gave an account of our present knowledge of the series. He showed they must have begun much later than was thought in Evans's time and altogether did not cover any great period of time. He showed how a study of find-spots had enabled different series to be attributed to different tribes, and showed how the chronology had been established from identifications with individuals mentioned in Roman sources and from style.

APRIL 18, 1939.

ORDINARY MEETING.

Rev. EDWARD A. SYDENHAM, President, in the Chair.

The Minutes of the last Meeting were read and approved.

Captain Reginald Lee and Dr. Philip Lederer were elected Fellows of the Society, and Miss J. M. C. Toynbee was proposed for election.

Rev. E. A. Sydenham exhibited a dupondius of DIVVS AVGVSTVS struck on a sestertius flan.

Mr. William Gilbert showed an aureus of Julian the Tyrant who reigned in Pannonia for a few months in A.D. 284-285, *rev.* Liberty holding cap and cornucopiae (Cohen 4, wt. 69.5 gr.) Very rare. Formerly in the Vienna Museum.

Mr. G. C. Haines read the second part of his paper on "The Decline and Fall of the Roman Monetary System" in which he dealt with the third century. He outlined the political and economic history down to the reform of Diocletian and showed how political vicissitudes were reflected in the coinage.

MAY 18, 1939.

ORDINARY MEETING.

HAROLD MATTINGLY, Esq., Vice-President, in the Chair.

The Minutes of the last Meeting were read and approved.

Mr. Leonard Forrer was elected an Honorary Fellow of the Society.

Miss J. M. C. Toynbee was elected a Fellow of the Society.

Mr. Bertram Pearce exhibited a unique coin of Carausius from Richborough with a remarkable and not fully explained reverse type.

Mr. A. H. F. Baldwin showed an unpublished medallion of Antoninus Pius, *rev.* Sylvanus and uncertain animal.

Mr. William Gilbert exhibited two very fine solidi; one of Plautilla, wife of Caracalla (Cohen 6, wt. 110 gr.), *rev.* **CONCORDIA**: struck at Antioch; and the other of Delmatius, nephew of Constantine the Great (Cohen 15, wt. 70 gr.), *rev.* Prince standing left, two standards behind him. Struck at Constantinople.

Mr. C. C. Oman read a paper on "Some Contemporary Imitations of Medieval Coin-motifs", in which he gave some examples of ornamentation in medieval furniture and jewellery copied from coins, and called attention to the value of such evidence for dating objects of art. (This paper is published in this volume of the *Numismatic Chronicle*.)

Miss Toynbee read a paper in which she gave an account of three remarkable new Roman medallions, that of Antoninus Pius above-mentioned, the type of which was discussed, and a remarkable large gold piece of Libius Severus, and a gold medallion of Theodosius II. (This paper will be published in the *Numismatic Chronicle*, June 1939.)

JUNE 15, 1939.

ANNUAL GENERAL MEETING.

Rev. EDWARD A. SYDENHAM, President, in the Chair.

The Minutes of the Annual General Meeting of June 16, 1938, were read and approved.

Messrs. Gilbert Askew and L. H. Rawson were appointed scrutineers of the ballot.

Professor David M. Robinson was proposed for election.

The following report of the Council was laid before the Meeting.

The Council have again the honour to lay before you the Annual Report on the state of the Royal Numismatic Society.

They regret to announce the deaths of the following seven Fellows:

P. W. P. Carlyon-Britton	Hans Nussbaum
G. C. Drabble	J. S. Shirley-Fox
W. R. Gourlay	Edward Snelling
F. E. Macfadyen	

They have also to announce the resignations of the following eight Fellows:

H. M. Choudhury, Esq.	H. V. Morton, Esq.
Leonard Forrer, Esq.	K. R. R. Readhead, Esq.
G. C. F. Hayter, Esq.	C. L. Stainer, Esq.
A. P. Middleton, Esq.	Cecil Thomas, Esq.

On the other hand they have to record the election of the following Honorary Fellow:

Leonard Forrer, Esq. ;

and of the following sixteen ordinary Fellows:

Albert H. Baldwin, Esq.	J. S. Kirkmam, Esq.
Señor Don Alfredo Benavides	L. J. Latham, Esq.
Professor S. K. Chakraborty	H. E. McIntosh, Esq.
Cuthbert Cook, Esq.	Captain Reginald Lee
J. H. Craig, Esq., C.B.	Sidney Moore, Esq.
A. S. Hemmy, Esq.	Dr. Philip Lederer
Alexander Hauser, Esq.	Dr. W. Schwabacher
	V. du Bedat Smythe, Esq.
	Miss J. M. C. Toynbee

The state of the Society compared with the corresponding period last year is therefore:

	Ordinary.	Honorary.	Total.
June, 1938	213	12	225
Since elected	16	1	17
	<hr/> 229	<hr/> 13	<hr/> 242
Deceased	7	—	7
Resigned	8	—	8
	<hr/> 214	<hr/> 13	<hr/> 227

The Council have also to report that they have awarded the Society's Medal for 1939 to Mr. J. W. E. Pearce, F.S.A., in recognition of his services to the study of the Roman coinage of the later Empire.

The Treasurer's Report, which appears on pp. 14-15, was laid before the Meeting.

The Reports of the Secretary and Treasurer were adopted on the motion of the President.

The President then presented the Society's Medal to Mr. J. W. E. Pearce, F.S.A., and said :

It is with very great pleasure that I hand to you the Medal in the name of the Royal Numismatic Society. That the Society's Medal is not merely a complimentary testimonial, but is awarded as the unanimous recognition of merit, is an established fact. And for this reason the members of the Council are agreed that you are, in the fullest sense, deserving of it.

You have made important contributions to the study of Roman numismatics by placing our knowledge of the Valentinian and Theodosian coinage on an intelligible and scientific basis, thereby clearing up many problems of the later fourth century. You have also classified numerous important Romano-British finds, from Richborough, Lydney, and many other sites, of which detailed reports have appeared from time to time in the *Numismatic Chronicle*.

During the past decade, increasing importance has attached to coins found, either singly or in masses, on Roman sites in this country. These are no longer regarded as so much buried treasure to be converted by the finder into current coin at the earliest opportunity, but are recognized as valuable criteria for dating the sites and other things associated with them. Their evidence, however, cannot be rightly gauged without an expert and intimate knowledge of the coins, as well as of the place and conditions of their burial. Hence, it is because you have incorporated just this knowledge into your reports that they are of so great value.

AS AT DECEMBER 31, 1938.

LIABILITIES.		ASSETS.	
£	£ s. d.	£	£ s. d.
31. 12. 37.		31. 12. 37.	
<i>Sundry Creditors.</i>		<i>Library, Furniture, &c.—</i>	
197	215 0 0	As at December 31, 1937 .	1 0 0
		<i>Sundry Debtors—</i>	
573	0 0 0	Bernard Quaritch, Ltd.	11 5 0
		Commissioners of Inland	
20	9 9 0	Revenue	8 16 0
		2	20 1 0
		<i>Subscriptions in Arrear</i>	15 15 0
434	434 8 5	<i>Investments.—As at December</i>	
		31, 1937.	
		(In the name of the Society)	
		£200 5% Conversion Stock	
	503 15 9	1944-64	200 0 0
		£1,100 London, Midland	
		and Scottish Railway,	
		4% Preference Stock	556 4 0
0	81 15 3		
		CASH AT BANK	756 4 0
		(N.B.—Stock of International	0 0 0
		Congress Volumes and of	
		<i>Namismatic Chronicles</i> in hand	
		has been ignored.)	
	64 15 3		
	£793 0 0		£793 0 0
	£1224		£1224

INCOME AND EXPENDITURE ACCOUNT OF THE ROYAL NUMISMATIC SOCIETY

YEAR ENDED DECEMBER 31, 1938.

EXPENDITURE.		INCOME.	
	£ s. d.		£ s. d.
To <i>Numismatic Chronicle</i>	328 11 3	By Entrance Fees	6 6 0
" Rent	56 5 0	" Subscriptions	327 10 0
" Postages, Printing, and Stationery	32 14 7		
" Legal Charges	30 11 0	" Sales of <i>Numismatic Chronicles</i>	333 16 0
" Subscriptions written off	12 12 0	" Sales of International Congress Volume	121 8 0
" General Expenses	8 0 4	" Contributions towards Plates	27 10 0
" Library Account (Net)	6 12 6	" Sundries	15 0 0
" Insurance	3 15 0		3 2 9
" Refreshments	3 4 6		
" Lantern Expenses	3 3 3		
" Balance—Excess of Income over Expenditure carried to Balance Sheet	485 9 5	" Income from Investments	500 16 9
			54 0 0
	69 7 4		•
	<u>£554 16 9</u>		<u>£554 16 9</u>

G. C. HAINES, *Hon. Treasurer.*

Audited and found correct,

WILLIAM GILBERT, *Hon. Auditors.*
 GILBERT H. ASKEW,
 May 4, 1939.

Your work is essentially that of a specialist. And specialization is one of the things that the science of Numismatics needs to-day. The time is past when it was said, half-contemptuously, that Roman coins were scarcely worth studying because all that could be known about them was written on their surface. We have since learnt that the things really worth knowing lie a good deal below the surface and, for the most part, are not written at all. This is just where the specialist comes in; and work such as yours has taken you far below the superficial classification of types. It has involved the closest investigation of the coinage, a meticulous comparison of styles and minor details, achieved not only by immense labour but by numerous journeys to museums and collections abroad. And more than this, the work, necessarily close and continuous, has entailed sacrifice—although, we sincerely hope, only a temporary sacrifice—of that most important faculty, eyesight. Here I venture to repeat a piece of friendly advice, which I have already suggested; namely, that, when you resume your numismatic research after an enforced, though well-earned, rest, you relinquish for a while the exacting study of *minimi* and look at nothing smaller than *sestertii*! I am confident that, if you follow this treatment, you will derive benefit in more ways than one.

I have mentioned your literary and research work, from which, not only we, but future generations of numismatists will profit. But I should like to add an expression of the appreciation, which I know all the Fellows of the Society feel, on account of your work for the Society both as a member of the Council and as one of the most regular attenders at its meetings. In presenting this Medal to you *optime merenti*, it is a personal pleasure to add *amico maxime venerando*.

In reply, Mr. Pearce said :—

Mr. President, Ladies and Gentlemen :

I thank you, sir, for the kind way in which you have spoken of my work, and I thank the Council who have so

generously rewarded it with the great honour of this medal. I am proud to believe that, in awarding it to me, the Council was really paying a tribute to the interest and importance of that period of Roman Numismatics which I have done my poor best to rescue from unmerited neglect. My work has throughout been a delight to me, and has brought with it its own reward. Dr. Regling, in a kind letter of encouragement, described it as "pioneer" work. That word in itself suggests its thrilling interest; but, apart from all this intrinsic interest, I owe to it also many pleasant memories of travel to distant countries which otherwise I should never have visited, and, above all, I owe to it many valued friendships both here and abroad. And now is added the unlooked-for prize of this beautiful medal.

That was indeed a red-letter day in my life, on which, some fifteen or sixteen years ago, I received from my old friend, the late Mr. A. G. K. Hayter, a very heavy parcel and a letter, explaining that he was suddenly called away to some exploration work in Egypt and relied upon me to clean and classify some few thousands of Richborough coins which the parcel contained. I knew very little about Roman coins, nothing at all about those which formed the bulk of the Richborough finds. I must have been a sad trial to Mr. Mattingly during that first year of my numismatic career. However, his help was always forthcoming, and his patience—so far as he allowed me to see—never gave way. The coins were mostly in poor condition; on the later coinage several emperors shared the same types, and the mint-marks were very varied and often very complicated. It was often impossible to feel sure that one was recording "the truth, the whole truth, and nothing but the truth" of the moneyers' intentions. It became clear to me that there would be a great saving of time and a great gain in accuracy if the archaeologist had at his command an authoritative list of the coinage of this period, by which to check his own results. An attempt to supply such a list

from perfect specimens took me round the chief European coin-cabinets. To cut a long story short, my interest grew with the accumulating evidence, historical vistas were seen to open out in various directions, and my time has since been devoted to exploring these. The work is still far from completion, and a happy hunting-ground awaits the numismatist who is fortunate enough to realize and avail himself of the opportunities it offers.

I need hardly say that I feel greatly abashed at finding myself in the distinguished company of our medallists. But, of course, there can be no gratification in receiving the medal unless the recipient can himself feel that he has really earned it. There are more ways than one in which a numismatist can render useful service to our Science. There occurs to my mind a classification I have read or heard somewhere of the three German emperors which, with the simple change of "Kaiser" to "Numismatiker", seems to me to apply with peculiar aptness to numismatists. First came the "greise Kaiser", then the "weise Kaiser", and lastly the "Reise-Kaiser". The "grey-haired numismatist" can, of course, only be the man who has devoted a long life to his numismatic studies. (The first half-century of my own was, alas! numismatically speaking, a sheer waste.) His knowledge must be profound and he may well earn our medal. Likely enough, he is also the "wise numismatist", who has the highest title of all. He is pre-eminently the man who is responsible for British Museum Catalogues or volumes of "Mattingly and Sydenham". He can with confidence, and unerringly, interpret the historical evidence of the coins with which he is dealing. But only when he can feel assured that he has all the available evidence before him. An argument *ex silentio* is hazardous in this later period when two, three, or four emperors may share in a common reverse. May I illustrate my meaning by a simple example? In the British Museum is a *vota* coin of Theodosius, which, taken by itself, must be dated later than the period of his joint reign with Gratian; in a Continental

Museum is a *vota* coin of Gratian, which, taken by itself, must be dated earlier than the period of his joint reign with Theodosius. But they have identical reverse, and must both, on their combined evidence, be dated to the period of joint rule. Here is seen the usefulness of our third class, the "Reise-numismatiker", the "Numismatist-errant", in which I modestly claim a place. He brings together the evidence for the "wise numismatist" to exercise his wisdom upon. Without his services the judgement of the "wise numismatist" may well miss the truth as completely as that of the three blind scientists who maintained respectively that an elephant was a "sort of snake", "a sort of tree", and "a sort of rope", according to the particular piece of evidence which they happened to handle. It is, sir, in this humble but, I believe, very useful role of the "Reise-numismatiker" that I feel I may, in all humility and with sincere gratitude, accept this medal.

The President then delivered the following address:—

The science of Numismatics may be said to possess a philosophy of its own—a philosophy of *beata tranquillitas*, undisturbed by the tumults of politics or the greed of nations, unmoved by the lapse of centuries or the vagaries of fashion: yet not the *tranquillitas* of complacent inertia, but that which emanates from the honest desire to add something to our fund of knowledge from the rich resources of the past.

At no time more than the present is such a philosophy needed; when the civilized world seems to have gone mad, or rather, because a handful of people have gone mad and the rest of the world has been forced to squander the best of its brains, its manhood, and its resources, in devising machinery for its own destruction; and when, in consequence of this mad obsession, practically all constructive work for the moral or material good of mankind has been brought to a standstill. So from these disquieting reflections we turn to our Society, not merely with a sense of

relief, but with the assurance that, in contrast to the destructiveness not only of war but the preparations for possible war, here, at any rate, we find something that aims at being definitely constructive. True, the contribution made by Numismatics to the world's betterment may seem small, and by some may be looked upon as merely "useless lumber of the mind", nevertheless, that contribution undoubtedly makes for peace, and as such may rank among the nobler influences of to-day.

Touching the affairs and fortunes of our Society, the past year has certainly been one of tranquillity, and although comparatively uneventful, has nevertheless been productive of a considerable amount of useful work. Of this I shall speak more fully later, since it is customary in this annual address to begin with the more personal aspect of the Society. Here we must count our losses as well as our gains.

During the year we have lost eight of our Fellows through death. Two of these were numismatists of no ordinary distinction, whose names and work are familiar to every student of our national coinage. I refer to Major Carlyon-Britton and Mr. Shirley-Fox.

Major Carlyon-Britton, whose death occurred on June 26 of last year, a fortnight after that of his wife, had been Captain in the Royal Inniskilling Fusiliers and subsequently Major of the West Yorkshire Regiment. He also held the positions of High Sheriff of Middlesex (1913-1914), Deputy-Lieutenant of Gloucestershire, and J.P. for Middlesex. He was elected Fellow of the Royal Numismatic Society in 1894, and in 1904 he founded the British Numismatic Society, of which he was the first president. He will be remembered by many as an enthusiastic numismatist and a collector of untiring energy. His interest was confined almost exclusively to the study of the coinage of this country, on which he has written numerous valuable papers and articles. Amongst them may be mentioned his "History of the Reigns of William I and II" and "Histories of the

Mints". The latter, owing to the exigencies of the Great War, was, however, never completed. In the *British Numismatic Journal*, of which he was for some years joint-editor, there appeared in 1905 an article on "Treasure Trove, the Treasury and the Trustees of the British Museum"—a violent and outspoken attack on the then existing methods of dealing with finds. In the old system there were undoubtedly serious abuses, and it will scarcely be denied that they constituted just cause for his onslaught. Happily, since that time things have improved and the new regulations regarding Treasure trove are distinctly advantageous to the interests both of the finder and of the nation. Other articles by Major Carlyon-Britton are: "The Oxford Mint in the reign of Alfred", "The Saxon, Norman, and Plantagenet Coinage of Wales", "Historical Notes on the First Coinage of Henry II", "Cornish Numismatics", and an important paper on the "Unique Mancus of King Offa". Evidence of Major Carlyon-Britton's ardour as a collector of coins may be seen by reference to the Sale Catalogue of his magnificent series of British and English coins, and also to the large collection of gold coins that was dispersed after his death.

Mr. J. S. Shirley-Fox was elected a Fellow in 1913. Most of his work was connected with the British Numismatic Society, and was done conjointly with his brother, H. B. Earle-Fox. All English numismatists will owe a debt of gratitude to the brothers for their monumental work in classifying the coinage of Edward I, II, and III, which appeared in a series of studies in the *British Numismatic Journal*, vols. vi-x. Shirley-Fox also wrote two papers in vols. v and vi of the same journal. One of them gives the varied forms of cross to be found as the initial marks on Plantagenet and Tudor coins; the other shows how the dies from the eleventh century and later were made up with punches. The Society's Medal was awarded to him and his brother in 1920, and he also received in 1930 the gold medal of the British Numismatic Society, of which he had

been Vice-President. Living in the country as he did, he seldom came to our meetings. His only paper of late years was on the Florin Coinage pence and half-pence, published in the *Numismatic Chronicle*, 1928. His last work was entitled the *Pleasures of English Coin Collecting*, a little book intended to assist and encourage the young collector. An artist by profession, he was well known as a portrait painter, and, although of late years he had not been in good health, he was still able to paint some very good pictures. He was also the author of a book of *Reminiscences* and another on *Fly-fishing*, at which he was an expert.

Mr. Gilbert C. Drabble had been a Fellow of the Society for the last 20 years, but, living in the Isle of Wight, he did not attend many of our meetings. He had a very fine collection of English coins, especially Anglo-Saxon and Norman, which will be sold at Glendinings early in next month.

Mr. J. Rochelle Thomas, a well-known antique dealer, was elected a Fellow in 1920.

Mr. W. R. Gourlay had only been a Fellow of the Society for two years. After a long and distinguished career in the Indian Civil Service, from which he retired with the C.S.I. and C.I.E., he settled in Galloway and took a prominent part in the public life of the district. He began to collect a few years ago and was specially interested in Greek coins.

Mr. F. E. MacFadyen was a Newcastle collector who joined the Society in 1901. His fine Anglo-Saxon collection was sold at Glendinings in June, 1925.

Dr. H. Nussbaum was quite a young man who some years ago set up in business in Zürich on having to leave Germany. He was killed in an aeroplane accident while on a business trip to Paris.

Mr. Edward Snelling, who claimed descent from the eighteenth-century numismatist, was elected in 1905 and for many years was a very regular attendant at our meetings.

Also the following Fellows have resigned: Mr. H. M. Choudhury, Mr. G. C. F. Hayter, Mr. A. P. Middleton,

Mr. H. V. Morton, Mr. K. R. R. Readhead, Mr. C. L. Stainer, and Mr. Cecil Thomas.

During the past year sixteen new Fellows have been elected: Mr. A. H. Baldwin, Mr. J. S. Kirkman, Mr. Sidney Moore, Mr. A. S. Hemmy, Mr. J. H. Craig (Deputy-Master of the Mint), Dr. W. Schwabacher, Mr. H. E. MacIntosh, Señor Don Alfredo Benavides (the Peruvian Minister), Mr. du Bedah Smythe, Professor S. K. Chakraborty, Mr. Alexander Hauser, Mr. L. J. Latham, Dr. Philip Lederer, Captain Reginald Lee, Miss J. M. C. Toynbee, and Mr. Cuthbert Cook.

It augurs well for our future activities that three of our new Fellows, Dr. Lederer, Dr. Schwabacher, and Miss Toynbee, have already read papers to the Society.

Mr. Leonard Forrer has been elected an Honorary Fellow of the Society, and it is, I think, scarcely necessary for me to urge his many claims to this mark of distinction. There is probably no man in all London who is better known to coin collectors, both inside and outside the Royal Numismatic Society; and it will be remembered that quite recently he celebrated his jubilee as a numismatic expert. Besides numerous Reviews and Articles on Numismatics and Numismatists which Mr. Forrer has contributed regularly to the *Numismatic Circular*, his monumental work on Medallists is a veritable encyclopaedia of Medallie Art and gives full evidence of his scholarly and expert knowledge.

We offer our congratulations to Mr. Harold Mattingly, Assistant-Keeper of Coins in the British Museum and Vice-President of our Society, for having been awarded the Huntingdon Medal of the American Numismatic Society.

The papers read by Fellows of the Society during the present session cover a fairly wide field; and as these papers will duly appear in the *Chronicle*, where they may be read at leisure, I feel that my present duty is not to attempt to epitomize, still less to criticize, them, but rather to touch upon some of the main points which they present.

Taking the first, in order of chronology, Dr. Schwabacher brought to our notice several hitherto unpublished Greek coins. It is always important that a newly discovered type or variant should be put on record, and an element of rarity always adds interest to an unpublished coin. Although it has become a numismatic axiom that our knowledge of ancient coinage is gained mainly from common coins, it must be allowed that many an interesting sidelight has been thrown on it by some unsuspected type or rare variant. One of the most striking examples brought to our notice by Dr. Schwabacher was a Macedonian didrachm with the complete legend, ΜΑΚΕΔΟΝΩΝ ΠΡΩΤΗΣ ΜΕΡΙΔΟΣ. The well-known tetradrachms of this issue were evidently struck in vast quantities under Roman domination, 158-150 B.C., but this is the only example of a smaller denomination discovered so far. Its chief interest, however, lies in the fact that it leaves no doubt as to the meaning of the legend; and any ambiguity that might underlie the legend *Μακεδόνων πρώτης* on the tetradrachms is dispelled by the explanatory *μερίδος*; that is to say, the first of the four new districts of the Roman dependency. Among other newly discovered types, Dr. Schwabacher instanced coins of Scione, Methylius, Peirasia, and a hoard of drachms of Elis, of which twelve specimens were exhibited.

With regard to the Roman series, "The Decline and Fall of the Monetary System of Augustus" was dealt with in two papers by Mr. G. C. Haines. The subject is not only a vast one, but is complicated by the paucity of trustworthy contemporary information outside the coins themselves, and by the difficulty of translating our present-day views of economics into the conditions of Roman times. By a very thorough analysis of the phenomena presented by the coinage, and by extracting from history such facts as have a bearing on commercial and financial matters, Mr. Haines strove to reconstruct the economic conditions that resulted in the decline of the imperial coinage. Many incidental questions arising from the inter-relation of denominations

and the shifting standard of values, that for generations have taxed the ingenuity of numismatists, must, notwithstanding the fresh light that Mr. Haines was able to throw upon them, remain unsolved. What, for instance, was the scheme of values devised by Caracalla? And how did he intend his larger silver denomination, whose very name is uncertain, to fit in with the other coins—if indeed it did fit in? What exactly is denoted by the XX.1 on Aurelian's silver-washed successor of the so-called "antoninianus"? These and similar questions are frequently asked. And just because they seem so elementary it is particularly irritating that we cannot give decided answers.

Had we but the assurance of a Stukeley how much brain-fag might be avoided! Yet, after all, this kind of assurance is merely the bliss of ignorance; and if to-day we have moved away from the condition of fanciful assurance to that of more scholarly inquiry, we have the satisfaction of knowing that the path lies open which ultimately will lead to more exact knowledge. This, I would venture to suggest, may be taken as the moral of Mr. Haines's two interesting papers. In their title he mentions the Decline and Fall of the coinage. Actually he traced its decline down to the time of Diocletian, but did not face its final debacle, which of course came later. To have done so would have necessitated another lengthy paper, treating of problems, in some ways more prolix, and monetary conditions more confused. But I venture to hope that Mr. Haines will not be daunted by the fearsomeness of the task but will give us the last chapter of the story on some future occasion.

Coming to the coinage at closer range, in a paper entitled "The Christian Revolution on Roman Coins", Mr. Mattingly traced the growing influence of Christianity over the Roman world as evidenced by coin-types of the fourth century. The story is well known—one may say, exclusively known—from the writings of ecclesiastical historians. But in the coinage we find an independent record, and, just because it is independent and also contemporary, its information has

a peculiar importance and is worthy of detailed consideration.

For over three centuries imperial coin-types of a religious character were exclusively pagan. After the reign of Theodosius they become definitely Christian. The period of transition begins under Constantine, when the first indications of religious change are seen in the use of symbols, such as the cross or ✠. At first these are introduced on the coins unobtrusively and almost timidly along with types that are either obviously pagan, or are capable of a double interpretation, e.g. *Soli invicto comiti* or *Gloria exercitus*. During the second and third centuries oriental cults, mainly connected with sun-worship, had gained considerable popularity throughout the western Empire, and there seems no question that to a large extent they prepared the way for the recognition of Christianity. This was partly on account of their unlikeness to the older paganism, which had broken down, and partly because in several respects they anticipated the newer Faith. The indebtedness of Christianity to oriental cults, more particularly to Mithraism, is not unnaturally glossed over, or ignored, by Christian writers; nevertheless, it is just one of the points so strikingly brought out by the coin-record.

Constantine's vision of the cross and prophetic motto, "In hoc signo vinces", may have suggested the idea of using Christian symbols. It is not until the time of Vetricano, however, that the motto appears boldly as a coin-legend; and, even then, the accompanying type of Victory crowning the emperor has nothing distinctively Christian about it. From this time onwards Christian symbols become more frequent and less equivocal; for example, the large ✠ as the main type, with A and Ω signifying Christ as the beginning and the ending.

Mr. Derek Allen's paper on the "Ancient British Coinage" was specially welcome, not merely on account of its intrinsic interest but because it is over six years since a paper on this subject was read to the Society. The last paper, which

many of us will recall, was read by the late George Brooke, and may be described without extravagance as an epoch-making one. For the first time in the history of numismatics he put the chronology of this early coinage on an intelligible basis by proving, beyond all question, that gold staters did not make their first appearance in Gaul till nearly the end of the second century B.C. These "Philippi" were imitated first by the Gaulish and later (i.e. after 75 B.C.) by the British tribes. Thus, at a blow, Dr. Brooke demolished a whole mass of fanciful speculation and faulty deduction that had hitherto obscured the British coinage. Moreover, every scrap of evidence that has come to hand since goes to confirm his view. From this starting-point Mr. Allen reviewed the various groups of early coins assigned to this country and northern Gaul. With regard to the material there was very little that was new, but in the handling of it he threw new light on old problems and suggested several important readjustments of the chronology.

Perhaps one of the most interesting is the early date assigned to the flat and grotesque tin coins which were evidently copied from barbarous Gaulish coins attributed to the Sequani, these in turn having been derived from a Massilian prototype. The view, suggested by Evans, that these curious pieces represent a decadent form of imitation and consequently belong to a later date, has apparently been taken for granted till it was challenged by Mr. Allen, first in a paper read at the Numismatic Congress in 1936 and then in his present article. It certainly entails some recasting of our conception of the coinage if, as Mr. Allen maintains, these are in all probability the earliest species of money actually made in Britain. Without attempting to reproduce the arguments by which he arrives at this conclusion, it is sufficient to say that they are logically sound and are backed by the evidence of local finds.

The peculiar trend of artistic perception, seen more particularly in the gold coins, is a theme that may be worthy of fuller development. I referred to it last year in connexion

with the coinage attributed commonly to the Channel Islands, but actually belonging to the Armorican district of northern Gaul. This trend shows itself, not in a series of more or less unsuccessful attempts to reproduce a human face or a horse by incompetent craftsmen, but rather in the evolution of a decorative symbolism, by which these things are expressed without any element of realism. The coins of the Bellovaci, which are perhaps the earliest that found their way into Britain, illustrate an intermediate phase of the trend, in which a small but perfectly defined human profile is overweighted by a mass of laureate and volute ornamentation. Gradually the human features disappear and the design approximates to an irregular cruciform. The details, by means of which the motif is expressed, vary considerably, and the method of using them is characteristic of the north European peoples. That is to say, British art, at an early stage, breaks away from all indebtedness to Greek or Roman prototypes and follows an independent line of development.

Mr. Derek Allen's other paper on "The Supposed Halfpence of King John" has already been printed in the *Chronicle*; and, as it will doubtless have been read and digested by all who are interested in the question, it will suffice merely to refer to it. To have settled a vexed problem once and for all is always a matter of satisfaction, to say nothing of the credit due to the solver of the problem. It may, therefore, be regarded as a real achievement on the part of Mr. Allen that he has been able to show conclusively that these rare "Johannes" half-pence cannot possibly be attributed to King John of England, but were struck at various Irish mints, most probably by that obscure and not very reputable Justiciar, John de Courci, during the reign of Henry II.

In his paper on "Some Contemporary Imitations of Medieval Coin Motifs" Mr. Charles C. Oman broke new ground, at any rate so far as subjects hitherto brought to the notice of the Society are concerned. In it he showed

that valuable results could be obtained by using a knowledge of coins in the study of other varieties of art. The paper was confined to the Middle Ages, and four pieces at the Victoria and Albert Museum were taken as examples.

The first was the foot of a monstrance which had a decorative band formed by motifs taken from continental sterling. This confirmed the other indications that the piece originated in the Low Countries, c. 1300.

The second was an oak casket covered with copper-gilt plaques stamped with imitations of the king's head from the penny and the lion sejant from the half-florin. This was probably made as a topical money-box by some London coppersmith at the time of the appearance of the ill-fated florin coinage of 1344.

The third was an elaborate girdle of carved wood, the devices on which included two coats-of-arms and the representation of a coin. Taken together, these established a link with the two Johns of Montfort, father and son, Dukes of Brittany 1341-1399.

Lastly, as an instance of what numismatists might gain by the study of other types of art, was given an early fourteenth-century Netherlandish jetton of which the only record was an impression on the side of a fifteenth-century French mortar.

Mr. Oman's paper certainly opens up a new and interesting line for research. My chief regret is that I was unfortunately debarred from hearing it. However, I shall look forward to reading it in the *Chronicle* in due course.

On the same evening Miss Toynbee, whom we welcome as one of our newest Fellows, described two recently discovered gold medallions of Theodosius and Severus III. Both pieces are remarkable. The reverse type of Severus III has up to the present only been known on medallions of the Constantinian period, but Miss Toynbee pointed out that certain adaptations had been made in the rendering of the type which were consistent with the middle of the fifth century.

One evening during the session was devoted to the exhibition of coins and medals with types of military interest, of which a detailed account will be found in Proceedings of the Society.

Among the coins and medals exhibited at ordinary meetings were many rarities, fine specimens, and pieces of unusual interest. It is always a pleasure as well as a privilege to be able to examine a rare coin, the actual possession of which only falls to the fortunate few. We are grateful, therefore, to those Fellows who have kindly given us this opportunity by exhibiting some of their treasures.

Of the numismatic works published during the past year the following call for special notice. The third volume of *Sylloge Nummorum Graecorum*, published by the British Academy, contains the first part of the Lockett Collection, i.e. the coins of Spain and Italy. It is unnecessary to stress the importance of this great work. It presents a vast mass of material, fully illustrated, which is indispensable to students and collectors of Greek coins. Vol. iii is quite up to the standard of its predecessors with regard to the excellence of its plates, and has an added advantage in giving fuller descriptions of the types.

The American Numismatic Society is to be congratulated on the inauguration of its new publication, *Numismatic Studies*. While none will deny the value of *Numismatic Notes and Monographs*, which began as far back as 1921 and now numbers well over eighty volumes, the new work is conceived on a larger scale, which is a very decided improvement. The first volume is devoted to an important study by Mr. E. T. Newell on "The Coinage of Eastern Seleucid Mints". Few series are so beset with problems of mintage and attribution as the earlier Seleucid coinage, and the only hope of ever solving them lies in intensive study. This is essentially Mr. Newell's method. By giving meticulous attention to details and by bringing his very wide knowledge to bear upon them he has succeeded in segregating the

Eastern issues of the first six members of the Seleucid dynasty. Thus he has unravelled an important part of the tangled problem, which Sir George Macdonald first broached in his article on the Seleucids, written as far back as 1903. From the intricate nature of the subject and the minute care required in handling it, it is scarcely to be expected that Mr. Newell's monograph will afford light reading. But if it makes somewhat heavy demands on the patience of the reader, it is difficult to see how this could have been avoided; and the excellent series of plates help immensely towards following his classification.

Two other important articles by Mr. Newell should be mentioned: (1) "The Seleucid Mints of Ace-Ptolemais and Damascus" in vol. 84 of *Notes and Monographs*, and (2) "Miscellanea Numismatica—Cyrene to India" in vol. 82 of the same series, which contains descriptions of hitherto unpublished coins and unusual issues of very considerable interest.

Although not primarily a numismatic work, *The Greeks in Bactria and India*, by Mr. W. W. Tarn, will be found of great value to students of the ancient coinages of the East. The settlement of the Greeks in Asia, after the expedition of Alexander the Great, is one of those amazing developments with an equally amazing anti-climax. The history of the Bactrian and Indian kingdoms has hitherto been obscure and confused, but the general conception of it has been entirely revolutionized by the new light that Mr. Tarn has thrown on it. In drawing his conclusions he makes use of materials drawn from many sources, but specially from Bactrian and Indian coins. His work may therefore be regarded as an outstanding example of the use of numismatics, not only for the confirmation, but for the re-writing of history.

In the Roman section one of the most important contributions is Dr. Strack's work on Antoninus Pius, in *Untersuchungen*, vol. iii. Here he applies his methods of thoroughness, such as were shown in his recent works on

Trajan and Hadrian, to a section of the Imperial coinage which hitherto has scarcely received the attention it deserved. Apart from a few types with an obviously historical bearing, the coinage of Antoninus Pius has generally been regarded as dull. Yet of Pius himself history gives a magnificent record, and his reign is one of the most satisfactory—indeed, a veritable “golden age” of prosperity, and Dr. Strack makes it clear that the coinage corresponds with the character of the reign. Not only is it far from dull but it reflects the greatness and stability of Pius and his régime. That the coinage presents certain difficulties no one will deny, and it is possible that all have not yet been satisfactorily surmounted. But Dr. Strack’s work is undoubtedly a valuable addition to our literature on the period. There is only one criticism that I venture to make, and with it I think those who have tried to study Dr. Strack’s book will probably agree. It is with regard to his method of describing obverses by a kind of shorthand, made up of signs, numbers, letters, &c. As this method is peculiarly his own, and is not, so far as I am aware, followed by other writers, it causes some little difficulty. Indeed, it requires to be mastered before the descriptions can be understood, and it may be questioned whether this initial difficulty is entirely compensated for by any advantages of conciseness that it otherwise possesses.

Vol. iv, part 2, of *Roman Imperial Coinage*, which covers the period from Macrinus to Pupienus, was published last autumn; and in its general setting out the editors trust that it is quite equal to the previous volumes. In a work of this kind, the compilation of which has extended over many years, greater uniformity in the method of description and classification will be found as the work has advanced. This is specially noticeable in this last volume, partly, no doubt, because the coinage is on the whole more straightforward, and partly because the period covered is a comparatively short one. In the writing of this volume the editors have been glad to welcome the collaboration of

Mr. C. H. V. Sutherland, Assistant-Keeper of Coins in the Ashmolean Museum.

There yet remains the third part of vol. iv before *Roman Imperial Coinage* is complete down to the time of Diocletian's reform, and we hope to publish this before the end of the year. We have received many criticisms of the work, mostly friendly ones. But a question that is sure to be asked, if indeed it has not been asked already, is, "Are you going to stop in the middle of the reign of Diocletian, or are you going to carry on to the end of the Western Empire?" Unfortunately, the answer cannot be given at the moment. But the old truism about Rome not having been built in a day may very well be applied to the writing of the history of her coinage. After all, the builders of Rome were not dependent on publishers!

Professor Alföldi has written two interesting articles on "The Eastern Mints of Gallienus" (*Berytus*, 1938, pp. 47-91, and the "Coins of Siscia" (second instalment). Although there is a wealth of material for these studies, anything like definite clues regarding mintage are scarce. Hence, conclusions drawn from them are almost unavoidably speculative.

The much-debated question as to the date on which the tribunician power was assumed is discussed at length in a monograph by Mr. Mason Hammond (published by the American Academy in Rome). As sources of evidence he makes use of coins and inscriptions, but when these are in disagreement he inclines to allow greater weight to the latter. Here most probably we should be inclined to question the soundness of this judgement. In any case the discrepancy is only a matter of days, and, except where very close dating is required, is relatively unimportant. The study is valuable as a piece of academical research rather than as the final settlement of a question which must probably remain an open one.

In an interesting monograph, entitled *Two Virtues of Tiberius*, Mr. C. H. V. Sutherland discusses the significance

and associations of the types *Clementia* and *Moderatio* on the dupondii.

A more lengthy treatise comes from Dr. Denis Van Berchem on *Les distributions de blé et d'argent à la plèbe romaine sous l'Empire*. This is a study of the various public distributions made at Rome and elsewhere in connexion with the *Annona*, *Congiaria*, and *Liberalitates*, of which mention is made on the coinage.

We must congratulate Dr. George C. Miles on his recent publication, *The Numismatic History of Rayy*, which forms vol. 2 of the new *Numismatic Studies* of the American Numismatic Society.^f This monograph gives, with considerable learning, the record of the various issues of this important Persian Mint (the Rhages of the classical writers), from the time of the Arab conquest until its destruction by the Mongols in the thirteenth century. Besides its obvious importance to oriental numismatists, this book is of great value to the historian of medieval Islam.

The same writer has contributed to the *Numismatic Chronicle* (1939, pp. 63 ff.) a monograph on "The Ayyübid Dynasty of the Yaman and their Coinage", in which he describes fully a hoard of silver coins, nearly all of which are unpublished, from south Arabia.

On the English coinage fewer works than usual seem to have been published. But the following from the *British Numismatic Journal* (vol. xxii, 1936-1937, issued last winter) should be mentioned:

Mr. Derek Allen on "Some Tenth-Century Northumbrian Pennies", in which he gives new interpretations of some of the later Viking coins.

Mr. C. E. Blunt on the "Coinage of Edward IV about 1461-1470" with particular reference to the gold, in which he suggests that the now very rare heavy noble represented a comparatively large issue in 1464, and proposed an arrangement for the types of the angel. Two independent studies of the coinage of Edward VI are given by Dr. Arnold and Mr. Blunt.

Mr. Lockett gives a valuable and fully illustrated study of the Civil War coinage of Truro and Exeter. Mr. L. A. Vidler gives the numismatic history of Rye, and Mr. H. A. Parsons publishes a number of interesting varieties of coins of the British Colonies.

Colonel H. M. Grant has published the first instalment of what promises to be an invaluable index of British medals since 1760 (the date when the British Museum Catalogue stopped). The instalment comes down to 1820.

Amongst works dealing with the coinage of modern times the following are important. Mr. David M. Bullowa's *Commemorative Coinage of the United States, 1892-1938* (Numismatic Notes and Monographs, no. 83), in which he describes special issues struck in commemoration of public events, centenaries, &c.

Coins of the World is a standard catalogue of twentieth-century issues, and is dedicated to the memory of the late Howland Wood. The material for this work was collected and classified by Mr. Wood shortly before his death last year. In fact the work, though posthumous, is really his. The book is clearly arranged and fully illustrated.

The foregoing list of publications, on which I have commented, is necessarily somewhat eclectic, since it is obviously impossible to include the entire literary activities of the numismatic world in a single survey. It is equally impossible for me personally to read carefully all the books that I have mentioned. I am, therefore, indebted to members of the British Museum Coin Department for giving me notes on which to base this summary.

It will be seen that many of the works are of a highly specialistic nature, and on this account are particularly valuable. It is probably true to say that, in the past, all branches of numismatics suffered from too much dependence on broad theorization, with the result that anomalies and contradictions were always cropping up. Obviously, the existing methods were incapable of dealing with problems which were largely of their own making. Hence the only

satisfactory way of doing so lies in specialized studies such as those which are 'daily adding solidly to our knowledge.

In looking forward, as we are bound to do, to fresh activities, I should like to say a word or two regarding a projected work, on which Mr. Mattingly and I have been working for some years past. This is a book on the Coinage of the Roman Republic. Not that there is any lack of literature on the subject. But our recent researches, more particularly with regard to the dating of the denarius, necessitate a recasting of the traditional conception of most of the coinage and a radical revision of its chronology. I mentioned the importance of this new dating of the denarius in my address to you last year, and I venture to refer to it again, because a well-known numismatist, Signorina Cesano, has recently disputed the point, although, I think, quite inconclusively. I would point out that the date was arrived at by Mr. Robinson, Mr. Mattingly and, in a humbler way, by myself, not by some sudden inspiration, but as the outcome of independent trial and research carried on over a lengthy period, and that all our subsequent investigations have gone to confirm it. We feel, therefore, that the time has come when this revised outlook should be presented in a concise form and we hope the volume will be printed by next summer.

In conclusion, I wish to thank Mr. J. Allan and his colleagues of the Coin Department for the help they have so generously given me, not only in the preparation of this address but in very many other ways besides. Also I thank all those who have read papers or exhibited coins at meetings, since it is very largely through them that interest is stimulated in our Society and in Numismatics generally.

Mr. Owston Smith proposed a vote of thanks to the President for his address.

The result of the ballot for office-bearers for 1939-40 was announced as follows:—

President.

REV. EDWARD A. SYDENHAM, M.A.

Vice-Presidents.

HAROLD MATTINGLY, Esq., M.A.

PROFESSOR SIR CHARLES OMAN, K.B.E., M.A., D.C.L.,
LL.D., F.S.A., F.B.A.

Treasurer.

G. C. HAINES, Esq., F.S.A.

Secretaries.

JOHN ALLAN, Esq., M.A., F.S.A.

E. S. G. ROBINSON, Esq., M.A., F.S.A.

Foreign Secretary.

JOHN WALKER, Esq., M.A., M.R.A.S.

Librarian.

L. G. P. MESSENGER, Esq.

Members of the Council.

DEREK F. ALLEN, Esq., B.A.

GILBERT ASKEW, Esq., F.S.A. (Scot.).

C. E. BLUNT, Esq., F.S.A.

WILLIAM GILBERT, Esq., F.R.S.A., L.R.I.B.A.

BERTRAM W. PEARCE, Esq., M.A., F.S.A.

J. W. E. PEARCE, Esq., M.A., F.S.A.

L. H. RAWSON, Esq.

W. OWSTON SMITH, Esq., M.A., F.R.Hist.Soc.

R. B. WHITEHEAD, Esq., M.A., M.R.A.S., F.A.S.B.

H. NELSON WRIGHT, Esq.

The President proposed a vote of thanks to the Auditors and the Scrutineers of the Ballot and adjourned the Society until October 19.